# Fall 2016 Levee Maintenance Deficiency Summary Report Overall LMA & Unit Ratings, including USACE Erosion Survey

#### Sacramento River Basin

NA0016 Sacramento River West Side Levee	Overall LMA Rating	Total LMA Miles	however, U Rated Miles are present, so the Overall LMA					
District	M *	49.64	Rating is M instead of A.					
Data di Itana		Maintena	nce Deficiancy		Enforc	ement	Design & System Obsolescence	
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Vegetation	0.02		0.02	0.04%	0.20			
Trim / Thin Trees	0.22		0.22	0.44%				
Encroachments	0.02		0.02	0.04%	4.11	0.02		
Animal Control	0.03	0.02	0.11	0.22%				
Slope Stability	0.02		0.02	0.04%				
Crown Surface / Depressions / Rutting	0.01		0.01	0.02%				
Seepage / Sandboils								1.72
Supplemental								
2015 USACE Erosion Survey, DRAFT	0.56		0.56	1.13%				
DWR UCIP Field Study					0.38	0.02		
LMA Totals:	0.88	0.02	0.96	1.93% *	4.69	0.04	0.00	1.72
Unit No. 01 Sacramento River RB	Overall Unit Rating	Total Unit Miles	U Rated Mile	Threshold Percer es are present, so				
Unit No. 01 Sacramento River RB  NA0016				es are present, so			ng is M	
NA0016	Rating	Miles 49.64	U Rated Mile	es are present, so	the Overa		ng is M  Design 8	& System
	Rating	Miles 49.64	U Rated Mile instead of A.	es are present, so	the Overa	Il Unit Ratir	ng is M  Design 8	& System scence U Miles
NA0016	Rating M *	Miles 49.64 Maintena	U Rated Mile instead of A.	es are present, so	the Overal	Il Unit Ratir	ng is M  Design 8  Obsole	scence
NA0016 Rated Item	Rating M *	Miles 49.64 Maintena	U Rated Mile instead of A.	es are present, so	the Overal	Il Unit Ratir	ng is M  Design 8  Obsole	scence
NA0016  Rated Item  Earthen Levee	Rating M *  M Miles	Miles 49.64 Maintena	U Rated Mile instead of A. nce Deficiancy M + 4U Miles	Threshold %	Enforce M Miles	Il Unit Ratir	ng is M  Design 8  Obsole	scence
NA0016  Rated Item  Earthen Levee  Vegetation	M * M Miles	Miles 49.64 Maintena	U Rated Mile instead of A.  nce Deficiancy  M + 4U Miles  0.02	Threshold %	Enforce M Miles	Il Unit Ratir	ng is M  Design 8  Obsole	scence
Rated Item  Earthen Levee  Vegetation Trim / Thin Trees	M * M Miles  0.02 0.22	Miles 49.64 Maintena	U Rated Mile instead of A.  nce Deficiancy M + 4U Miles  0.02 0.22	Threshold %  0.04%  0.44%	Enforce M Miles 0.20	ement U Miles	ng is M  Design 8  Obsole	scence
Rated Item  Earthen Levee  Vegetation Trim / Thin Trees Encroachments	M * M Miles  0.02 0.22 0.02	Miles 49.64 Maintena U Miles	U Rated Mile instead of A.  The Deficiency  M + 4U Miles  0.02  0.22  0.02	Threshold %  0.04%  0.44%  0.04%	Enforce M Miles 0.20	ement U Miles	ng is M  Design 8  Obsole	scence
Rated Item  Earthen Levee  Vegetation  Trim / Thin Trees  Encroachments  Animal Control	M * M Miles  0.02 0.22 0.02 0.03	Miles 49.64 Maintena U Miles	U Rated Mile instead of A.  nce Deficiancy  M + 4U Miles  0.02  0.22  0.02  0.11	Threshold %  0.04%  0.44%  0.04%  0.22%	Enforce M Miles 0.20	ement U Miles	ng is M  Design 8  Obsole	scence
Rated Item  Earthen Levee  Vegetation  Trim / Thin Trees  Encroachments  Animal Control  Slope Stability	M Miles  0.02 0.02 0.02 0.03 0.02	Miles 49.64 Maintena U Miles	U Rated Mile instead of A.  nce Deficiancy  M + 4U Miles  0.02  0.22  0.02  0.11  0.02	Threshold %  0.04%  0.44%  0.04%  0.22%  0.04%	Enforce M Miles 0.20	ement U Miles	ng is M  Design 8  Obsole	scence
Rated Item  Earthen Levee  Vegetation Trim / Thin Trees Encroachments Animal Control Slope Stability Crown Surface / Depressions / Rutting	M Miles  0.02 0.02 0.02 0.03 0.02	Miles 49.64 Maintena U Miles	U Rated Mile instead of A.  nce Deficiancy  M + 4U Miles  0.02  0.22  0.02  0.11  0.02	Threshold %  0.04%  0.44%  0.04%  0.22%  0.04%	Enforce M Miles 0.20	ement U Miles	ng is M  Design 8  Obsole	U Miles
Rated Item  Earthen Levee  Vegetation Trim / Thin Trees Encroachments Animal Control Slope Stability Crown Surface / Depressions / Rutting Seepage / Sandboils	M Miles  0.02 0.02 0.02 0.03 0.02	Miles 49.64 Maintena U Miles	U Rated Mile instead of A.  nce Deficiancy  M + 4U Miles  0.02  0.22  0.02  0.11  0.02	Threshold %  0.04%  0.44%  0.04%  0.22%  0.04%	Enforce M Miles 0.20	ement U Miles	ng is M  Design 8  Obsole	U Miles
Rated Item  Earthen Levee  Vegetation Trim / Thin Trees Encroachments Animal Control Slope Stability Crown Surface / Depressions / Rutting Seepage / Sandboils Supplemental	M Miles  0.02 0.22 0.02 0.03 0.02 0.01	Miles 49.64 Maintena U Miles	U Rated Mile instead of A.  nce Deficiancy  M + 4U Miles  0.02  0.22  0.02  0.11  0.02  0.01	0.04% 0.04% 0.44% 0.02% 0.04%	Enforce M Miles 0.20	ement U Miles	ng is M  Design 8  Obsole	U Miles

# **LMA District Cover Sheet**

# Fall 2016 Levee Inspection Results

# **Sacramento River West Side Levee District**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
† Overall LMA Rating (Fall Only)			M *	
	** Non-receipt of Summ Reports may effect o		* Overall LMA Threshold 10.00%; however, U Ri so the Overall LMA Ra	ated Miles are present,
† SPRING INSPECTIONS: Overall maintenance deficiencies are rated	ratings are not detern d using the same crite			ual maintenance
FALL INSPECTIONS: The overall maintena within the attached u			ion and maintenance de nded to be an indiction o	
Comments				

#### **Unit Cover Sheet**

# Fall 2016 Levee Inspection Results

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles
Unit No. 01 Sacramento River	Right	49.64

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			M *	
Date of Inspection	3/15/2016 - 3/16/2016		9/27/2016 - 9/28/2016	
DWR Inspector	Jai Lor		Oleg Yakimov	
Accompanied By			Gary Marler RD0108	

<sup>\*</sup> Overall LMA Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall LMA Rating is M instead of A.

#### **Summer & Winter Inspections**

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

# Levee Inspection Report By Mile - Fall 2016

# **Sacramento River West Side Levee District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start		Rating **	Α	Issue No.		27	
LM End		Issue Type +	Ma	Location * N/A			
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item		s & Maintena	nce		0		0
пеш	Manuals				0		0
DWR ID	DWR_NA0	016_01_s _ 201	3_27	'			
		Comn	nent Cod	de			
		Inspecto	or Comm	nent			
District has	s the levee	O&M manua	ls.				

No Photos

LM Start		Rating **	Α	Issue No.		28	
LM End		Issue Type +	Location *		N/A		
Earthen Levee			GPS Latitude/Longitude				
Category				Start		End	
Item Emergency Supplies &					٥		0
пеш	Equipmer	nt			٥		0
DWR ID	DWR_NA0	016_01_s _ 201	3_28				
		Comn	nent Cod	de			
Inspector Comment							
District ma	District maintains a stockpile of flood response material.						

No Photos

LM Start		Rating **	Α	Issue No.		35	
LM End		Issue Type +	Ма	Location *		N/A	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Flood Pre	paredness &	Training		0		0
пеш					0		0
DWR ID	DWR_NA0	016_01_s _ 201	3_35				
		Comn	nent Cod	le			
Inspector Comment							
District has	District has flood response plans and maintains flood response training.						

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	0.08	Rating **	М	Issue No.		104
LM End	0.25	Issue Type +	Ма	Location *		WS
Cotogony	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Item	Trim / Thi	n Trees		38.8006	42 °	38.802413°
пеш				-121.7247	23°	-121.724317°
DWR ID	DWR_NA0	016_01_s _ 201	6_104			
		Comn	nent Cod	de		
T1 : Trim t	rees to at l	east five feet	above g	round level		
		1	0			
		Inspecto	or Comm	ient		



View of the tree branches on the waterward side of the levee looking upstream. Spring 2016.

LM Start	0.14	Rating **	М	Issue No.		1567
LM End	0.14	Issue Type +	En	Location *		WS
Category	ental	GPS La	atitud	e/Longitude		
Category				Start		End
Item	DWR UCIP Field Study			38.8014	71 °	38.801471 °
пеш				-121.7251	71 °	-121.725171°
DWR ID						

#### Comment Code

#### Inspector Comment

FS\_ID:10087 DS\_ID:20224 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Headwall on WS undermined about 3-4-feet. FIELD\_STRUCT\_DESC: 1 of 3: 36-inch steel drainage pipe through levee 30.0 feet below crown. Flap gate on the waterward end. 24-inch pipe sleeved through the 36-inch pipe. Annular space between pipes grouted. Pumps in pumphouse with walkway on LS toe. Originally

included in the 1960 O&M manual.

FS Date: 3/12/2013

#### Photo 1 of 2: UCIP\_FA\_2016\_10087\_17235.jpg



Pumphouse at LS toe.

# Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	0.14	Rating **	М	Issue No. 1		1567 (cont)		
LM End	0.14	Issue Type +	En	Location *		WS		
Supplemental				GPS Latitude/Longitude				
Calegory	Category			Start		End		
Item	DWR UCI	P Field Study		38.80147	1°	38.801471	0	
пеш				-121.72517	1°	-121.725171	0	
DWR ID								

#### Inspector Comment

Comment Code

FS\_ID:10087 DS\_ID:20224 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Headwall on WS undermined about 3-4-feet. FIELD\_STRUCT\_DESC: 1 of 3: 36-inch steel drainage pipe through levee 30.0 feet below crown. Flap gate on the waterward end. 24-inch pipe sleeved through the 36-inch pipe. Annular space between pipes grouted. Pumps in pumphouse with walkway on LS toe. Originally

included in the 1960 O&M manual.

FS Date: 3/12/2013



Air vents at outlet on WS toe.

LM Start	0.14	Rating **	М	Issue No.		1566			
LM End	0.14	Issue Type +	En	Location *	WS				
Category	ental	GPS Latitude/Longitude							
Category				Start		End			
Item	DWR UCI	P Field Study		38.8014	79°	38.801479°			
пеш				-121.7251	76°	-121.725176°			
DWR ID	D								
Comment Code									

#### Inspector Comment

FS\_ID:10085 DS\_ID:20356 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Headwall undermined 3-4-feet on WS toe. FIELD\_STRUCT\_DESC: 2 of 3: 36-inch steel drainage pipe through levee 30.0 feet below crown. Flap gate on the waterward end. 24-inch pipe sleeved through the 36-inch pipe. Annular space between pipes grouted. Pumps in pumphouse with walkway on LS toe. Originally included in the 1960 O&M manual.

FS Date: 3/12/2013

#### Photo 1 of 2: UCIP\_FA\_2016\_10085\_17227.jpg



Pump house on LS toe.

# Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	0.14	Rating **	М	Issue No. 1		566 (cont)	
LM End	0.14	Issue Type +	En	Location *	ition * WS		
Supplemental			GPS Latitude/Longi				
Calegory	Category			Start		End	
Item	DWR UCI	P Field Study		38.80147	'9 °	38.801479	0
пеш			-121.72517	'6 °	-121.725176	0	
DWR ID							

# Inspector Comment

Comment Code

FS\_ID:10085 DS\_ID:20356 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Headwall undermined 3-4-feet on WS toe.
FIELD\_STRUCT\_DESC: 2 of 3: 36-inch steel drainage pipe through levee 30.0 feet below crown. Flap gate on the waterward end. 24-inch pipe sleeved through the 36-inch pipe. Annular space between pipes grouted. Pumps in pumphouse with walkway on LS toe. Originally

included in the 1960 O&M manual.

FS Date: 3/12/2013



Air vents on pipes at WS toe.

LM Start	0.14	Rating **	M	Issue No.	1565			
LM End	0.14	Issue Type +	En	Location *	WS			
Category				GPS Latitude/Longitude				
Category			Start		End			
Item	DWR UCI	P Field Study		38.8014	91°	38.801491°		
пеш				-121.7251	84°	-121.725184°		
DWR ID								
Comment Code								

#### Inspector Comment

FS\_ID:10910 DS\_ID:20357 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Headwall undermined 3-4-feet on WS toe. FIELD\_STRUCT\_DESC: 3 of 3: 36-inch steel drainage pipe through levee 30.0 feet below crown. Flap gate on the waterward end. 24-inch pipe sleeved through the 36-inch pipe. Annular space between pipes grouted. Pumps in pumphouse with walkway on LS toe. Originally included in the 1960 O&M manual.

FS Date: 3/12/2013

#### Photo 1 of 2: UCIP\_FA\_2016\_10910\_18185.jpg



Pumphouse on LS toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	0.14	Rating **	М	Issue No.	1565 (cont)		
LM End	0.14	Issue Type +	En	Location *	WS		
Category				GPS Lat	tuc	le/Longitude	
Calegory	ory			Start		End	
Item	DWR UCI	P Field Study		38.80149	1°	38.801491	0
пеш				-121.72518	4 °	-121.725184	0
DWR ID							
	Comment Code						

# Inspector Comment

FS\_ID:10910 DS\_ID:20357 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Headwall undermined 3-4-feet on WS toe.
FIELD\_STRUCT\_DESC: 3 of 3: 36-inch steel drainage pipe through levee 30.0 feet below crown. Flap gate on the waterward end. 24-inch pipe sleeved through the 36-inch pipe. Annular space between pipes grouted. Pumps in pumphouse with walkway on LS toe. Originally

included in the 1960 O&M manual.

FS Date: 3/12/2013



Air vents on pipes at WS toe.

LM Start	0.15	Rating **	С	Issue No.		125		
LM End	0.15	Issue Type +	Ma	Location *		WS		
Category Earthen Levee			GPS Latitude/Longitude					
Category				Start		End		
Item	Erosion /	Bank Caving		38.8015	22°	38.801522°		
item				-121.7252	07°	-121.725207 °		
DWR ID DWR_NA0016_01_f _ 2016_125								
Comment Code								
E0 . C-b	CO. Cabadula vancia of avasias site usias to the secutions attack							

E2 : Schedule repair of erosion site prior to the next inspection.

Inspector Comment

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side	A : Acceptable M : Minimally Acceptable	N : Not Inspected/Rated C : Corrected	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	0.43	Rating **	С	Issue No.		107	
LM End	0.43	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroachi	ments		38.8048	41 °	38.804841 °	
пеш			-121.724190°				
DWR ID	DWR ID DWR_NA0016_01_s _ 2016_107						
		Comn	nent Cod	de			
DE : Debri	S						
		Inspecto	or Comm	nent			

No Photos

LM Start	0.47	Rating **	М	Issue No.		1574	
LM End	0.47	Issue Type +	En	Location *		LS	
Category			GPS Latitude/Longitude				
Category	category			Start		End	
Item	DWR UC	IP Field Study		38.8053	53°	38.805353 °	
пеш				-121.72420	07°	-121.724207°	
DWR ID							

# Comment Code

#### Inspector Comment

FS\_ID:10103 DS\_ID:20226 EP\_NO: 1331

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: There is no gate in the slide gate at the concrete distribution box off the landside toe. This may not be an issue as there is a slide gate at the WS toe.

FIELD\_STRUCT\_DESC: 54-inch corrugated metal irrigation pipe through levee 28.0 feet below crown. Vertical pumps on pile structure in the stream, walkway to pumps. Flap gates from pumps and slide gate inside a 7'X10-foot concrete surge box on the waterward side, 1948 installation. 15'X18-foot concrete distribution box 150-feet off landside toe with slide gate. (Permit No. 1331, 1948). Included in 1960 O&M manual.

FS Date: 3/25/2013 7:36:51 AM

#### Photo 1 of 2: UCIP\_FA\_2016\_10103\_17262.jpg



Concrete distribution box on 150-feet off landside toe.

# Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	0.47	Rating **	М	Issue No.	•	1574 (cont)	_
LM End	0.47	Issue Type +	En	Location *	LS		
Category	Supplemental GPS Latitude/Longitud				le/Longitude		
Category	Start			Start	End		
Item	DWR UCI	P Field Study		38.80535	3°	38.805353	0
пеш				-121.72420	)7°	-121.724207	0
DWR ID							
	Comment Code						

#### Inspector Comment

FS\_ID:10103 DS\_ID:20226 EP\_NO: 1331

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: There is no gate in the slide gate at the concrete distribution box off the landside toe. This may not be an issue as there

is a slide gate at the WS toe.
FIELD\_STRUCT\_DESC: 54-inch corrugated metal irrigation pipe through levee 28.0 feet below crown. Vertical pumps on pile structure in the stream, walkway to pumps. Flap gates from pumps and slide gate inside a 7'X10-foot concrete surge box on the waterward side, 1948 installation. 15'X18-foot concrete distribution box 150-feet off landside toe with slide gate. (Permit No. 1331, 1948). Included in 1960 O&M manual.

FS Date: 3/25/2013 7:36:51 AM



Pumping plant with concrete surge box and slide gate in foreground-off WS toe.

LM Start	0.68	Rating **	С	Issue No.		110	
LM End	0.68	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS Latitude/Longitude			
Calegory				Start		End	
Encroachments			38.808402°		38.808402 °		
item				-121.7244	23 °	-121.724423	0
DWR ID	DWR_NA0	016_01_s _ 201	6_110				
		Comn	nent Coc	le			
TR : Tree o	or limb						Т

Inspector Comment

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	0.79	Rating **	С	Issue No.		117	
LM End	0.79	Issue Type +	Ma	Location *		WS	
Category	evee		GPS La	tituc	e/Longitude		
Calegory				Start		End	
Item	Encroach	ments		38.81005	51 °	38.810051 °	
пеш				-121.72464	° Ol	-121.724640 °	
DWR ID DWR_NA0016_01_s _ 2016_117							
		Comn	nent Cod	de			
PR : Pruni	ngs						
		Inspecto	or Comm	nent			

No Photos

LM Start	1.16	Rating **	С	Issue No.		119	
LM End	1.16	Issue Type +	En	Location *		WS	
Category	Earthen L	evee		GPS Latitude/Longitude			
Category				Start		End	
Encroachments ltem			38.815417°		38.815417	0	
item					-121.725142 °		0
DWR ID	DWR_NA0	016_01_s _ 201	6_119				
		Comn	nent Coc	le			
TR : Tree o	or limb						
		Inspecto	or Comm	ent			

No Photos

LM Start	1.28	Rating **	A/W	Issue No.		82	
LM End	1.28	Issue Type +	Ма	Location *		WS	
Category Earthen Levee				GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		38.8170	36°	38.817036°	
item				-121.7254	10°	-121.725410°	
DWR ID DWR_NA0016_01_s _ 2014_82							
		Comn	nent Cod	de			
V7 : Trees	/ Woody \	/egetation					
		Inspecto	or Comm	nent			



View of the dying tree on the waterward side of the levee. Monitor trees that could pose a threat to the integrity of the levee. Fall 2015.

# **Levee Inspection Report By Mile - Fall 2016**

# **Sacramento River West Side Levee District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	1.33	Rating **	A/W	Issue No.		83
LM End	1.33	Issue Type +	Ma	Location *		WS
Category	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End
Item	Vegetatio	n		38.8177	'81 °	38.817781 °
пеш	-121.725466° -121.72546					-121.725466 °
DWR ID DWR_NA0016_01_s _ 2014_83						
		Comn	nent Cod	de		
V7 : Trees	/ Woody \	/egetation				
			_			
		Inspecto	or Comm	nent		
Monitor tre	es that po	se a future thr	eat to th	e integrity	of the	e levee

Photo 1 of 1 : FA\_2016\_NA0016\_435\_83\_20160913\_00034.jpg

View of the tree on the waterward side of the levee looking upstream. Spring 2016.

LM Start	1.48	Rating **	С	Issue No.		145		
LM End	1.48	Issue Type +	Ma	Location *		WS		
Category Earthen Levee				GPS Latitude/Longitude				
Category				Start		End		
Encroachments ltem				38.8199	947°	38.819947°		
iteiii				-121.725109° -121.725				
DWR ID DWR_NA0016_01_s _ 2016_145								
		Comn	nent Co	de				
TR : Tree	or limb							
			_					
		Inspecto	or Comn	nent				

No Photos

LM Start	1.73	Rating **	С	Issue No.		148	_
LM End	1.73	Issue Type +	Ма	Location *		WS	
Category Earthen Levee			GPS La	atitud	e/Longitude		
Category				Start		End	
Item	Encroachi	ments		38.8235	01°	38.823501 °	5
item				-121.7246	30°	-121.724630 °	2
DWR ID	DWR ID DWR_NA0016_01_s _ 2016_148						
		Comn	nent Cod	de			
TR : Tree	or limb						
		Inspecto	or Comm	nent			

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	1.87	Rating **	A/W	Issue No.		84	
LM End	1.87	Issue Type +	Ma	Location *	WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Vegetation			38.8255	34°	38.825534°		
пеш				-121.724749° -12		-121.724749°	
DWR ID DWR_NA0016_01_s _ 2014_84							
		Comn	nent Cod	de			
V7 : Trees	/ Woody \	/egetation					
		Inspecto	or Comm	nent			
Monitor trees that pose a future threat to the integrity of the levee.							



View of the tree on the waterward side of the levee looking upstream. Spring 2016.

LM Start	1.94	Rating **	С	Issue No.		85	
LM End	1.94	Issue Type +	Ма	Location *		LS	
Category Earthen Levee			GPS La	atitud	e/Longitude		
Category				Start		End	
Item	Slope Sta	bility		38.8265	67°	38.826567°	
пеш				-121.7250	60°	-121.725060 °	
DWR ID DWR_NA0016_01_s _ 2015_85							
		Comn	nent Coo	de			
S1 : Repai	r slope ins	tability.					
		Inspecto	or Comm	nent			
This issue	should be	monitored.					

# Levee Inspection Report By Mile - Fall 2016

# **Sacramento River West Side Levee District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	2.17	Rating **	U	Issue No.		149	
LM End	2.38	Issue Type +	Ob	Location *	LS		
Category Earthen Levee				GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Seepage / Sandboils			38.829567°		38.832050°	
item				-121.726814°		-121.729140°	
DWR ID	DWR ID DWR_NA0016_01_s _ 2016_149						
		Comn	nent Cod	de			
		Inspecto	or Comm	nent			
Seepage a site.	Seepage area has been staked and noted by LMA. Monitor seepage						

LM Start	2.17	Rating **	U	Issue No.	149 (cont)
LM End	2.38	Issue Type +	Oh	Location *	LS



The monitoring stake is on the shoulder of the levee on the landward side. Spring 2016.

Photo 2 of 2: FA\_2016\_NA0016\_435\_149\_20160913\_00074.jpg



View of the seepage on the landward side of the levee looking upstream. Spring 2016.

LM Start	2.39	Rating **	М	Issue No.		1550	
LM End	2.39	Issue Type +	En	Location *		LS	
Category Earthen Levee				GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Encroachments 38.832203 °				38.832203°		
пеш				-121.7292	-121.729278°		
DWR ID DWR_NA0016_01_f _ 2013_1550							
		Comn	nent Cod	de			
EQ : Equip	ment						
		Inspecto	or Comm	nent			
Equipment	are at the	levee toe.					

#### Photo 1 of 2: FA\_2016\_NA0016\_435\_1550\_20160913\_00127.jpg



Pieces of machinery and debris at the levee toe. Spring 2014

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

NA0016

#### Flood Control Project Maintenance Levee Inspections

# Levee Inspection Report By Mile - Fall 2016

# Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	2.39	Rating **	М	Issue No.	1	1550 (cont)								
LM End	2.39	Issue Type +	En	Location *	LS									
Category Earthen Levee			GPS Latitude/Longitude											
Category			Start		End									
Encroachments ltem			38.8322	03°	38.832203 °									
item		-12			78°	-121.729278°								
DWR ID DWR_NA0016_01_f _ 2013_1550														
		Comn	nent Cod	de										
EQ : Equip	ment													
			_											
		Inspecto	or Comm	nent										
Equipment	are at the	levee toe.												



View of the machinery along the landward levee toe looking upstream. Fall 2015.

LM Start	2.70	Rating **	A/W	Issue No.		150	
LM End	2.70	Issue Type +	Ma	Location *	WS		
Category Earthen Levee				GPS La	atitud	le/Longitude	
Category			Start		End		
Vegetation				38.8358	31°	38.835831 °	
-121.732077					77°	-121.732077 °	
DWR ID	DWR_NA0	016_01_s _ 201	6_150				
		Comn	nent Cod	de			
V7 : Trees	/ Woody \	/egetation					
Inspector Comment							
Monitor trees that pose a future threat to the integrity of the levee.							



View of the tree on the waterward side of the levee looking upstream. Spring 2016.

# Levee Inspection Report By Mile - Fall 2016

# Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	2.74	Rating **	М	Issue No.		98	
LM End	2.74	Issue Type +	Ма	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory			Start		End		
Item	Trim / Thi	n Trees		38.8364	54°	38.836454°	
item				-121.732037 °		-121.732037 °	
DWR ID DWR_NA0016_01_f _ 2015_98							
		Comn	nent Cod	de			
T1 : Trim t	rees to at I	east five feet	above g	round level			
			_				
		Inspecto	or Comm	nent			

Photo 1 of 1 : FA\_2016\_NA0016\_435\_98\_20160913\_00041.jpg

View of the trees on the landward side of the levee that needs to be trimmed looking upstream. Fall 2015.

LM Start	2.80	Rating **	М	Issue No.		6	
LM End	2.80	Issue Type +	En	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Category			Start		End		
Item	Vegetatio	n		38.8373	00°	38.837300°	
nem				-121.731775°		-121.731775°	
DWR ID	DWR ID DWR_NA0016_01_f _ 2012_6						
		Comn	nent Cod	de			
V6 : Lands	scaping						
		Inspecto	or Comm	nent			
		Порсск	o Comm	ICIT			
River Garden Farms							



View of the landscaping along the landward slope at River Gardens Farms looking upstream. Fall 2015.

# Levee Inspection Report By Mile - Fall 2016

# Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	3.14	Rating **	A/W	Issue No.		86		
LM End	3.14	Issue Type +	Ma	Location *	WS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Calegory				Start		End		
Item	Vegetatio	n		38.8412	83°	38.841283 °		
					-121.728827 °			
DWR ID DWR_NA0016_01_s _ 2014_86								
		Comn	nent Cod	de				
V7 : Trees	/ Woody \	egetation/						
			_					
		Inspecto	or Comm	nent				



Monitor trees that pose a future threat to the integrity of the levee.

Spring 2014

LM Start	3.56	Rating **	М	Issue No.		8	
LM End	3.94	Issue Type +	En	Location *	LS		
Category	Earthen L	Earthen Levee GPS Latitude/Lor			e/Longitude		
Category			Start		End		
ltem Encroachments				38.8467	85°	38.850758°	
пеш				-121.729995 °		-121.725263°	
DWR ID	DWR_NA0	016_01_s _ 201	2_8				
		Comn	nent Cod	de			
DT : Ditch							
		Inspecto	or Comm	nent			
Concrete lined ditch runs along the levee toe.							



View of the ditch on the landward side of the levee looking upstream. Spring 2016.

# Levee Inspection Report By Mile - Fall 2016

# Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	4.00	Rating **	U	Issue No.		153	
LM End	4.15	Issue Type +	Ob	Location *	LS		
Category Earthen Levee				GPS La	atitud	e/Longitude	
Category			Start		End		
Seepage / Sandboils			38.851382 °		38.851991 °		
item	item			-121.724708°		8° -121.727000°	
DWR ID	DWR_NA0	016_01_s _ 201	6_153				
		Comn	nent Cod	de			
		Inspect	or Comm	nent			

Seepage area has been staked and noted by LMA. Monitor seepage site.

LM Start	4.00	Rating **	U	Issue No.	153 (cont)
LM End	4.15	Issue Type +	Ob	Location *	LS



View of the seepage on the landward side of the levee looking upstream. Spring 2016.

Photo 2 of 2: FA\_2016\_NA0016\_435\_153\_20160913\_00080.jpg



LMA has staked seepage area and are monitoring the situation.

LM Start	4.59	Rating **	С	Issue No.		1551	
LM End	4.59	Issue Type +	En	Location *		LS	
Category	Earthen L		GPS La	atitud	e/Longitude		
Category				Start		End	
Encroachments ltem				38.8569	95°	38.856995 °	
item	Rem			-121.730938 °		-121.730938°	
DWR ID	DWR ID DWR_NA0016_01_f _ 2013_1551						
		Comn	nent Cod	de			
DE : Debri	S						
Inspector Comment							
Previous pile has been burned but a new pile has started at the same spot.							

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	4.67	Rating **	С	Issue No.		112	
LM End	4.67	Issue Type +	Ma	Location *		WS	
Category	Earthen Levee				atitud	e/Longitude	
Calegory				Start		End	
Item	Encroachments			38.8581	56°	38.858156°	
пеш				-121.7314	22°	-121.731422°	
DWR ID DWR_NA0016_01_f _ 2015_112							
		Comn	nent Cod	de			
TR : Tree	or limb						
Inspector Comment							

No Photos

LM Start	4.80	Rating **	М	Issue No.		9	
LM End	4.80	Issue Type +	En	Location *	LS		
Catagonia Earthen Levee			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	Encroachments			38.859446°		38.859446°	
Item				-121.732774°		-121.732774°	
DWR ID	DWR_NA0	016_01_s _ 201	2_9				
Comment Code							
FE : Fence	•						

#### Inspector Comment

chain link fence runs along levee

# Photo 1 of 1 : FA\_2016\_NA0016\_435\_9\_20160913\_00009.jpg



View of the chain link fence along the landward levee toe looking upstream. The fence does not obstruct the view. Fall 2015.

LM Start	4.85	Rating **	М	Issue No.		124	
LM End	4.85	Issue Type +	Ма	Location *		CR	
Category Earthen Levee			GPS Latitude/Longitude				
Category				Start		End	
Item	Animal Control			38.859555°		38.859555 °	
пеш	item			-121.7335	55 °	-121.733555 °	
DWR ID DWR_NA0016_01_f _ 2016_124							
Comment Code							

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

#### Photo 1 of 1 : FA\_2016\_NA0016\_435\_124\_20160929\_00237.jpg



View of an animal burrow on levee crown. Fall 2016 inspection.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# **Sacramento River West Side Levee District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	4.99	Rating **	U	Issue No.		111	
LM End	5.09	Issue Type +	Ob	Location *	LS		
Earthen Levee			GPS Latitude/Longitude				
Category				Start		End	
Item	Seepage / Sandboils			38.8599	09°	38.860409°	
пеш				-121.7361	19°	-121.738001 °	
DWR ID DWR_NA0016_01_s _ 2016_111							
		Comn	nent Cod	de			
		Inspecto	or Comm	nent			
Seepage area has been staked and noted by LMA. Monitor seepage site.							

LM Start	rt <b>4.99</b> Rating **		U	Issue No.	111 (cont)
I M End	5.09	Issue Type +	Ob	Location *	LS



Stake stating what date the seepage was last monitored. Spring 2016.

Photo 2 of 2: FA\_2016\_NA0016\_435\_111\_20160913\_00056.jpg



View of the seepage on the landward side of the levee looking downstream. Spring 2016.

LM Start	6.12	Rating **	U	Issue No.		152	
LM End	6.12	Issue Type +	Ob	Location *	LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Seepage / Sandboils			38.8705	03°	38.870503°	
пеш			-121.750068°		-121.750068°		
DWR ID DWR_NA0016_01_s _ 2016_152							
		Comn	nent Cod	de			
Inspector Comment							
Seepage area has been staked and noted by LMA. Monitor seepage site.							



View of the seepage on the landward side of the levee looking upstream. Spring 2016.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# **Sacramento River West Side Levee District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	6.12	Rating **	U	Issue No.	152 (cont)			
LM End	6.12	Issue Type +	Ob	Location *	LS			
Earthen Levee			GPS La	atitud	e/Longitude			
Category		Start		End				
Seepage / Sandboils			38.8705	03°	38.870503°			
item			-121.750068 °		-121.750068 °			
DWR ID	DWR ID DWR_NA0016_01_s _ 2016_152							
		Comn	nent Cod	de				
		Inspecto	or Comm	nent				
Seepage area has been staked and noted by LMA. Monitor seepage site.								

LM Start	6.12	Rating **	U	Issue No.	152 (cont)
LM End	6.12	Issue Type +	Ob	Location *	LS



View of the seepage on the landward side of the levee looking downstream. Spring 2016.

#### Photo 3 of 3: FA\_2016\_NA0016\_435\_152\_20160913\_00078.jpg



LMA monitoring stake for the seepage. Spring 2016.

Photo 1 of 1: FA\_2016\_NA0016\_435\_154\_20160913\_00081.jpg

LM Start	6.31	Rating **	М	Issue No.	154			
LM End	6.31	Issue Type +	Ma	Location *	CR			
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Category				Start		End		
Crown Surface / Depressions /			38.8690	° 88	38.869088 °			
item	Rutting			-121.753220°		-121.753220 °		
DWR ID	ID DWR_NA0016_01_s _ 2016_154							
		Comn	nent Cod	le				
C2 : Repa	ir depressi	ons or ruts in	the crow	n or slope.				
		Inspecto	or Comm	ent				



View of the rut on the crown of the levee looking upstream. Spring 2016.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

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#### Flood Control Project Maintenance Levee Inspections

# Levee Inspection Report By Mile - Fall 2016

# Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	6.50	Rating **	U	Issue No.		156		
LM End	6.62	Issue Type +	Ob	Location *	LS			
Earthen Levee			GPS La	atitud	le/Longitude			
Category			Start		End			
Seepage / Sandboils			38.8681	27°	38.867530°			
item			-121.7564	99°	-121.758427 °			
DWR ID	DWR_NA0016_01_s _ 2016_156							
Comment Code								
Inspector Comment								
Inspector Comment Seepage area has been staked and noted by LMA. Monitor seepage site.								

LM Start	6.50	Rating **	U	Issue No.	156 (cont)
LM End	6.62	Issue Type +	Ob	Location *	LS



View of the seepage on the landward side of the levee looking downstream. Spring 2016.

Photo 2 of 2: FA\_2016\_NA0016\_435\_156\_20160913\_00083.jpg



Stake marks the seepage site on the levee prism and is placed on the landward shoulder. Spring 2016.

# Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	6.82	Rating **	М	Issue No.		1580	
LM End	6.82	Issue Type +	En	Location *	LS		
Category Supplemental				GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	DWR UCI	P Field Study		38.8648	62 °	38.864862 °	
пеш				-121.7575	16°	-121.757516°	
DWR ID						·	
Comment Code							

# Inspector Comment

FS\_ID:10129 DS\_ID:20228 EP\_NO: 1297

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Leak at flowmeter on WS berm may become problem

in near future.

FIELD\_STRUCT\_DESC: \*REMOVED\*2 of 2: 16-inch steel pipe through levee 5.2 feet below crown. Slant pumps in metal pump house on the waterward bank, supported on steel structure. Pipes discharge into 9.5'x12' concrete distribution box on the landward side. Sparline flow meter on pipes near the waterward toe. (Permit No. 1297, 1948). Also included in the 1960 O&M manual. Removed under permit No. 8501, 2012.

FS Date: 3/12/2013

LM Start	6.82	Rating **	М	Issue No.	1580 (cont)
LM End	6.82	Issue Type +	En	Location *	LS



Minor leak at flowmeter on WS berm.

Photo 2 of 2: UCIP\_FA\_2016\_10129\_17290.jpg



Pumphouse and steps on WS.

# Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	6.82	Rating **	М	Issue No.		1585	
LM End	6.82	Issue Type +	En	Location *		LS	
Category Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Itom	DWR UCIP Field Study			38.86487	3°	38.864873	0
Item				-121.75752	1°	-121.757521	0
DWR ID							

#### Inspector Comment

Comment Code

FS\_ID:46765 DS\_ID:25125 EP\_NO: 8501

Repair Type: Non-Urgent Crossing Status: Found

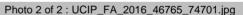
UCIP Comments: field inspection of the site revealed a few minor actions: 1. there are metal fence posts located near the pipe that should be cleared out for safety, 2. vegetation around the pipes should be cleared as it limits inspection, 3. some burrowing activity was noticed nearby the pipes.

FIELD\_STRUCT\_DESC: A 20 inch steel pipe and a 16 inch steel pipe are located at levee mile 6.889 and 6.89, respectively. Both pipes have a protective paint coating. The pipes are used to supply irrigation water to the adjacent fields. On the water side of the levee, the pipes are above ground and follow the slope of the bank into the river. A metal pumphouse, supported on a steel frame is located on a bench on the waterside of the levee. When the pumps are operational a drum fish screen is lowered over the pipe intakes on a track. Both irrigation pipes travel through the levee and have siphon breakers in CMP risers on the land side crest of the levee. The pipes discharge under submerged conditions to a 9.5 ft x 12 ft concrete distribution box. There are two gated outlets on the distribution box that lead to distribution canals. FS Date: 10/9/2015 9:00:32 AM

LM Start	6.82	Rating **	М	Issue No.	1585 (cont)
LM End	6.82	Issue Type +	En	Location *	LS



view from levee crest along pipe profile on water side of levee. pipe daylight from levee and pumphouse.





view from levee crest along pipe profile toward land side of levee.CMP risers with siphon breakers and distribution box near land side levee toe.

\*Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A: Acceptable but Monitor & Maintain Enforcement

\* Issue Type

Ma: Maintenance Deficiancy

Ob: Design & System Obsolescence

En: Enforcement

# Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	6.82	Rating **	М	Issue No.		1586	
LM End	6.82	Issue Type +	En	Location *		LS	
Category Supplemental			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UCIP Field Study			38.86484	4 °	38.864844	0
пеш				-121.75754	o°	-121.757540	0
DWR ID							

#### Inspector Comment

Comment Code

FS\_ID:46766 DS\_ID:25126 EP\_NO: 8501

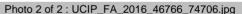
Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: a few actions are recommended based on field inspection: 1. clear out metal fence posts near daylight of pipe on water side levee. 2. clear vegetation around pipes on water side of levee to aid in inspection. 3. monitor burrowing activities on water side of levee. FIELD\_STRUCT\_DESC: A 20 inch steel pipe and a 16 inch steel pipe are located at levee mile 6.889 and 6.89, respectively. Both pipes have a protective paint coating. The pipes are used to supply irrigation water to the adjacent fields. On the water side of the levee, the pipes are above ground and follow the slope of the bank into the river. A metal pumphouse, supported on a steel frame is located on a bench on the waterside of the levee. When the pumps are operational a drum fish screen is lowered over the pipe intakes on a track. Both irrigation pipes travel through the levee and have siphon breakers in CMP risers on the land side crest of the levee. The pipes discharge under submerged conditions to a 9.5 ft x 12 ft concrete distribution box. There are two gated outlets on the distribution box that lead to distribution canals. FS Date: 10/9/2015

LM Start	6.82	Rating **	М	Issue No.	1586 (cont)
LM End	6.82	Issue Type +	En	Location *	LS



view from levee crest along pipe looking towards water side. shows pipe daylight and pump house





view from levee crest along pipe looking towards land side. shows siphon breaker standpipes and distribution box.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2016

# Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

6.87	Rating **	С	Issue No.		157
6.87	Issue Type +	Ma	Location *	WS	
Earthen L	evee		GPS La	atitud	e/Longitude
			Start		End
ltem Encroachments			38.8642	25°	38.864225°
			-121.757024°		-121.757024°
DWR_NA0	016_01_s _ 201	6_157			·
	Comn	nent Coc	de		
or limb					
	Inspecto	or Comm	nent		
	6.87 Earthen L Encroachr	6.87 Issue Type + Earthen Levee Encroachments  DWR_NA0016_01_s _ 201  Comnor limb	6.87 Issue Type + Ma Earthen Levee Encroachments  DWR_NA0016_01_s _ 2016_157  Comment Coor	6.87 Issue Type + Ma Location *  Earthen Levee GPS La  Start  Encroachments 38.8642  -121.7570  DWR_NA0016_01_s _ 2016_157  Comment Code	6.87   Issue Type +   Ma   Location *    Earthen Levee   GPS Latitud   Start   Encroachments   38.864225 °   -121.757024 °    DWR_NA0016_01_s _ 2016_157   Comment Code   or limb

No Photos

Rating \*\* Issue No. LM Start 7.26 С 158 Issue Type + Location \* WS LM End 7.26 Ма Earthen Levee GPS Latitude/Longitude Category Start End Encroachments 38.861243° 38.861243° -121.760243 -121.760243 DWR ID DWR\_NA0016\_01\_s \_ 2016\_158 Comment Code TR: Tree or limb Inspector Comment

No Photos

LM Start	7.57	Rating **	A/W	Issue No.		114	
LM End	7.57	Issue Type +	Ма	Location *	WS		
Earthen Levee			GPS La	atitud	le/Longitude		
Category				Start		End	
Vegetation			38.8633	23°	38.863323°		
пеш			-121.7651	77 °	-121.765177°		
DWR ID	DWR_NA0	DWR_NA0016_01_f _ 2015_114					
		Comn	nent Cod	de			
V7 : Trees	/ Woody \	egetation/					
			_				
		Inspecto	or Comm	nent			



View of the dying tree on the waterward side of the levee looking upstream. Fall 2015.

\*Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\*Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable CR: Corrected U: Unacceptable AW: Acceptable but Monitor & Maintain Enforcement

\*\*Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable Ob: Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2016

# Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	7.73	Rating **	С	Issue No.		115	
LM End	7.73	Issue Type +	Ma	Location *	CR		
Catagory	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item		rface / Depres	ssions /	38.8619	82°	38.861982°	
Rutting			-121.767576°		° -121.767576°		
DWR ID	DWR_NA0	016_01_f _ 201	5_115				
		Comn	nent Cod	de			
C2 : Repa	ir depressi	ons or ruts in	the crow	n or slope.			
		Inspect	or Comm	nent			

LM Start	7.80	Rating **	N	Issue No.		116	
LM End	8.64	Issue Type +	Ma	Location *	LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory		Start		End			
Trim / Thin Trees			38.8613	57°	38.856379°		
пеш			-121.768641 °		-121.781943°		
DWR ID	DWR_NA0	016_01_f _ 201	5_116				
		Comn	nent Cod	de			
T5 : Tree s	stumps.						
Inspector Comment							



View of the tree stumps along the landward levee toe looking upstream. Fall 2015.

# Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	7.86	Rating **	М	Issue No.		1582	
LM End	7.86	Issue Type +	En	Location *		LS	
Category Supplemental			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UCIP Field Study			38.86101	8 °	38.861018	0
пеш				-121.76965	i1°	-121.769651	0
DWR ID							

#### Inspector Comment

Comment Code

FS\_ID:10144 DS\_ID:20428 EP\_NO: 18206

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Flap gates rusted through at concrete distribution box

on LS toe.

FIELD\_STRUCT\_DESC: 1 of 2: 20-inch steel pipe through levee 4.7 feet below crown (Permit No. 18206, 2007). Two slant pumps in pump house on the waterward berm. Siphon breakers in corrugated metal riser units on the shoulder. Flap gate on both pipes in concrete distribution box on the landward side. Wooden steps on both slopes. Replaced 20-inch pipe installed under Permit No. 9377.

FS Date: 3/13/2013

LM Start	7.86	Rating **	М	Issue No.	1582 (cont)
LM End	7.86	Issue Type +	En	Location *	LS



Stairs, distribution box, and air vent in CMP riser on LS.

#### Photo 2 of 2: UCIP\_FA\_2016\_10144\_17306.jpg



Stairs and pump on WS.

# Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	7.86	Rating **	М	Issue No.		1581	
LM End	7.86	Issue Type +	En	Location *		LS	
Supplemental				GPS Latitude/Longitude			
Category				Start		End	
Item	DWR UCI	P Field Study		38.8610	17°	38.861017°	
item				-121.7696	58°	-121.769658°	
DWR ID							

# Inspector Comment

Comment Code

FS\_ID:10143 DS\_ID:20427 EP\_NO: 18206

Repair Type: Non-Urgent Crossing Status: Found

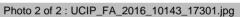
UCIP Comments: Flap gates rusted through at LS distribution box. FIELD\_STRUCT\_DESC: 2 of 2: 16-inch steel pipe through levee 4.7 feet below crown (Permit No. 18206, 2007). Two slant pumps in pump house on the waterward berm. Siphon breakers in corrugated metal riser units on the shoulder. Flap gate on both pipes in concrete distribution box on the landward side. Wooden steps on both slopes. Replaced 16-inch pipe installed under Permit No. 9377.

FS Date: 3/13/2013

LM Start	7.86	Rating **	М	Issue No.	1581 (cont)
LM End	7.86	Issue Type +	En	Location *	LS



Steps, air vent in riser, and distribution box on LS.





Stairs, pump platform on WS.

# Levee Inspection Report By Mile - Fall 2016

# **Sacramento River West Side Levee District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	8.45	Rating **	М	Issue No.		118		
LM End	8.45	Issue Type +	En	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroachi	ments		38.8585	59°	38.858559°		
пеш				-121.7796	89°	-121.779689°		
DWR ID DWR_NA0016_01_f _ 2015_118								
		Comn	nent Cod	de				
FW : Firew	vood							
		Inspecto	or Comm	nent				



View of the wood pile on the landward side of the levee. Fall 2015.

LM Start	9.09	Rating **	М	Issue No.		123			
LM End	9.09	Issue Type +	En	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude			
Calegory				Start		End			
Item	Encroach	ments		38.8593	20°	38.859320°			
item				-121.7849	39°	-121.784939 °			
DWR ID DWR_NA0016_01_f _ 2016_123									
		Comn	nent Cod	de					
TR : Tree	or limb								
			_						
		Inspecto	or Comm	nent					



Tree limbs on landside slope. Fall 2016 inspection.

LM Start	9.16	Rating **	М	Issue No.		92			
LM End	9.16	Issue Type +	Ma	Location *	LS				
Category Earthen Levee			GPS Latitude/Longitude						
Category				Start		End			
Item	Trim / Thi	n Trees		38.8602	84°	38.860284°			
item				-121.784788 °		-121.784788°			
DWR ID	DWR ID DWR_NA0016_01_s _ 2015_92								
		Comn	nent Cod	le					
T1 : Trim t	rees to at I	east five feet	above g	round level					
		Inspecto	or Comm	ent					

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	9.21	Rating **	М	Issue No.		1589			
LM End	9.21	Issue Type +	En	Location *		LS			
Category	Supplemental				GPS Latitude/Longitude				
Calegory				Start		End			
Item	DWR UCI	P Field Study		38.86099	93°	38.860993			
пеш				-121.7848	40 °	-121.784840			
DWR ID						,			

# Inspector Comment

Comment Code

FS\_ID:50039 DS\_ID:20231 EP\_NO: 1641

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 09/23/2016 - pipe is not actively used. No power to pump platform. vegetation growth obscuring view along pipe alignment on the WS toe (T.Hatch/UCIP) 09/01/2016 pipe is visible on the WS slope of the levee. The pipe appears intact on the WS and does not appear to have a meter. The siphon breaker on the LS slope appears to have been removed and replaced by a cap. No holes or missing connections were visible. WS levee slope appears to have a slight depression in the vicinity of the exposed pipe. (T. Hatch/UCIP)

03/13/2013 - Meter removed from the pipe on the WS and pipe is open. Pipe appears abandoned, and, if so, should be abandoned properly. (W. Wylie/UCIP)

FIELD\_STRUCT\_DESC: \*ABANDONED\* 14-inch steel irrigation pipe through the levee, 5.2 feet below the crown. A slant pump on a concrete pump platform on the waterside (WS). A siphon breaker on the landside (LS) slope. A sparling flow meter on the pipe on the WS slope. 42 inch concrete standpipe in concrete distribution box at the landside (LS) toe. (Permit No. 1641, 1959 - Erdman). [Additional Reference(s): DWR Levee Logs, 2006. USACE Sacramento O&M Manual 130, May 1960 (LM 9.31)].

FS Date: 9/23/2016

LM Start	9.21	Rating **	М	Issue No.	1589 (cont)
LM End	9.21	Issue Type +	En	Location *	LS



Concrete riser on LS toe.

Photo 2 of 2: UCIP\_FA\_2016\_50039\_17327.jpg



Pump platform on WS.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# **Sacramento River West Side Levee District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	9.67	Rating **	М	Issue No.		160		
LM End	9.67	Issue Type +	En	Location *	LS			
Cotogony	Earthen L	evee		GPS La	atitud	e/Longitude		
Category						End		
Item	Encroachi	ments		38.8622	79°	38.862279°		
item				-121.791088 °		3° -121.791088°		
DWR ID	/R ID DWR_NA0016_01_s _ 2016_160							
		Comn	nent Cod	le				
PR : Pruni	ngs							
Inspector Comment								



View of the pruning pile on the landward side of the levee looking upstream. Spring 2016.

LM Start	9.68	Rating **	A/W	Issue No.		29			
LM End	9.79	Issue Type +	Ма	Location *		WS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Odlogory				Start		End			
Item	Vegetatio	n		38.8623	845°	38.862848 °			
item				-121.791337 °		-121.793267 °			
DWR ID	DWR ID DWR_NA0016_01_s _ 2012_29								
		Comn	nent Cod	de					
V8 : Enviro	nmental F	Requirements.							
		Inspecto	or Comm	nent					

LM Start	9.68	Rating **	A/W	Issue No.	29 (cont)
LM End	9.79	Issue Type +	Ma	Location *	WS

# Photo 1 of 2 : FA\_2016\_NA0016\_435\_29\_20160913\_00021.jpg



View of the revegetation site on the waterward side of the levee looking upstream. Spring 2016.

Photo 2 of 2: FA\_2016\_NA0016\_435\_29\_20160913\_00022.jpg



Revegetation site sign. Spring 2016.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	9.90	Rating **	С	Issue No.		93			
LM End	9.90	Issue Type +	Ма	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory			Start		End				
Item	Trim / Thi		38.8640	57°	38.864057°				
пеш	item				76°	-121.794176°			
DWR ID	DWR_NA0	016_01_f _ 201	6_93						
		Comn	nent Cod	de					
T1 : Trim t	rees to at I	east five feet	above g	round level.					
Inspector Comment									

No Photos

LM Start	9.95	Rating **	U	Issue No.		161	
LM End	10.04	Issue Type +	Ob	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Category			Start		End		
Item	Seepage .	Seepage / Sandboils			59°	38.865583°	
item			-121.794563 °		-121.795685°		
DWR ID	DWR_NA0	016_01_s _ 201	6_161			·	
		Comn	nent Coo	le			
Inspector Comment							
Seepage area has been staked and noted by LMA. Monitor seepage site.							

LM Start	9.95	Rating **	U	Issue No.	161 (cont)
LM End	10.04	Issue Type +	Ob	Location *	LS

# Photo 1 of 2 : FA\_2016\_NA0016\_435\_161\_20160913\_00086.jpg



View of the seepage on the landward side of the levee looking upstream. Spring 2016.

Photo 2 of 2: FA\_2016\_NA0016\_435\_161\_20160913\_00087.jpg



Stake shows LMA is monitoring the seepage. Spring 2016.

\*Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable A: Not Inspected/Rated M: Minimally Acceptable CR: Corrected U: Unacceptable U: Unacceptable U: Unacceptable AW: Acceptable but Monitor & Maintain Enforcement

\*\* Rating

A: Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2016

# Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

	_							
LM Start	10.18	Rating **	М	Issue No.		122		
LM End	10.18	Issue Type +	En	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroach	ments		38.8650	)16°	38.865016°		
item	-121.798082°			82°	-121.798082°			
DWR ID DWR_NA0016_01_f _ 2016_122								
Comment Code								
PR : Pruni	ngs							
		Inspecto	or Comm	nent				

Photo 1 of 1: FA\_2016\_NA0016\_435\_122\_20160929\_00239.jpg



Tree prunings on WS slope. Fall 2016 inspection.

LM Start	10.69	Rating **	U	Issue No.		163
LM End	10.91	Issue Type +	Ob	Location *	LS	
Category Earthen Levee				GPS La	atituc	le/Longitude
				Start		End
Seepage / Sandboils			38.866965°		38.869808°	
iteiii				-121.8036	00°	-121.804722 °
DWR ID	DWR_NA0	016_01_s _ 201	6_163			
Comment Code						

#### Inspector Comment

Seepage area has been staked and noted by LMA. Monitor seepage site.

LM Start	10.69	Rating **	U	Issue No.	163 (cont)
LM End	10.91	Issue Type +	Ob	Location *	LS

#### Photo 1 of 2: FA\_2016\_NA0016\_435\_163\_20160913\_00088.jpg



View of the seeapage on the landward side of the levee looking upstream. Spring 2016.

#### Photo 2 of 2: FA\_2016\_NA0016\_435\_163\_20160913\_00089.jpg



Stake is planted on the shoulder of the levee on the landward side. Spring 2016.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	11.50	Rating **	М	Issue No.		7	
LM End	11.53	Issue Type +	Ma	Location *	WS		
Supplemental				GPS La	atitud	le/Longitude	
Category				Start		End	
Item	2015 USACE Erosion Survey, DRAFT			38.8748	54°	38.875109°	
пеш				-121.8130	18°	-121.813592°	
DWR ID	DWR_NA0	016_01_s _ 201	6_7				
		Comn	nent Cod	de			
Inspector Comment							
1997 - Toe	damage a	1997 - Toe damage and loss of cobble revetment and small patch of					

1997 - Toe damage and loss of cobble revetment and small patch of local damage to the cobble revetment. 2000 - Cohesive vertical toe; revegetation site. 2015: No observed changes. [2015 Site ID: SAC\_101-3\_R]



USACE 2013 Photo #1

LM Start	11.71	Rating **	U	Issue No.		966	٦
LM End	11.71	Issue Type +	En	Location *	ation * WS		
Category	evee	GPS Latitude/Longitude					
Calegory			Start		End		
Item	Encroach	ments		38.8768	65 °	38.876865	О
пеш				-121.8160	95°	-121.816095	O
DWR ID DWR_NA0016_01_s _ 2012_966						1	
Comment Code							

CR : Crops

#### Inspector Comment

New walnut orchard between toe and river with approximately 80-90 trees.

# Photo 1 of 1 : FA\_2016\_NA0016\_435\_966\_20160913\_00126.jpg

View of the walnut orchard planted on the waterward side of the levee looking upstream. Fall 2015.

LM Start	12.28	Rating **	С	Issue No.		164	
LM End	12.28	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Erosion / I	Bank Caving		38.8844	66°	38.884466	0
Item				-121.8171	78°	-121.817178	0
DWR ID	DWR_NA0	016_01_s _ 201	6_164				
		Comn	nent Cod	de			
E1: Note:	and monito	or erosion site					_
	Inspector Comment						
LMA is monitoring erosion site with stakes.							
1							

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	13.39	Rating **	С	Issue No.		166
LM End	13.39	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Item	Erosion /	38.8968	33°	38.896833°		
пеш	item				512°	-121.804512°
DWR ID	DWR_NA0	016_01_s _ 201	6_166			
		Comn	nent Coc	le		
E1: Note a	and monito	or erosion site				
Inspector Comment						
Runoff erosion is being monitored. Erosion is about 8 inches deep, 16 inches wide and 3 feet in length.						

No Photos

LM Start	13.98	Rating **	U	Issue No.		167	
LM End	13.98	Issue Type +	Ма	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory	Category					End	
Item	Animal Co	ontrol		38.90488	6°	38.904886	0
пеш			-121.80649	o°	-121.806490	0	
DWR ID	DWR ID DWR_NA0016_01_s _ 2016_167						
	Comment Code						

A2 : Repair the levee slope damaged by livestock and prevent large animal access.

#### Inspector Comment

Foxhole is close to the levee toe.

LM Start	13.98	Rating **	U	Issue No.	167 (cont)
LM End	13.98	Issue Type +	Ma	Location *	LS

#### Photo 1 of 2: FA\_2016\_NA0016\_435\_167\_20160913\_00094.jpg



Perspective view of the fox hole on the landward side of the levee looking upstream. Spring 2016.

Photo 2 of 2: FA\_2016\_NA0016\_435\_167\_20160913\_00095.jpg



Fox hole is close to the toe of the levee. Spring 2016.

\*Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable U: Unacceptable U: Unacceptable WA: Acceptable but Monitor & Maintain

\*\* Rating

A: Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	14.66	Rating **	С	Issue No.		170
LM End	14.66	Issue Type +	Ма	Location *		WS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Encroachi	ments		38.9107	'51 °	38.910751°
пеш				-121.816017°		-121.816017°
DWR ID	DWR_NA0	016_01_s _ 201	6_170			
		Comn	nent Coc	de		
TR : Tree	or limb					
		Inspecto	or Comm	nent		

No Photos

LM Start	14.72	Rating **	М	Issue No.		120
LM End	14.72	Issue Type +	Ma	Location *		WS
Category	Catagoria Earthen Levee			GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Encroach	ments		38.9115	76°	38.911576°
пеш				-121.8163	21.816376 ° -121.810	
DWR ID	DWR_NA0	016_01_f _ 201	6_120			
		Comn	nent Coc	de		
PR : Pruni	ngs					
		Inspecto	or Comm	nent		

Photo 1 of 1: FA\_2016\_NA0016\_435\_120\_20160929\_00240.jpg



View of prunings on waterside slope. Fall 2016 inspection.

LM Start	15.21	Rating **	С	Issue No.		171
LM End	16.63	Issue Type +	Ма	Location *		CR
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Item		rface / Depres	ssions /	38.9170	98°	38.927894°
пеш	Rutting			-121.819605 °		-121.838363 °
DWR ID DWR_NA0016_01_s _ 2016_171						
		Comn	nent Cod	le		
C3: Add a	ppropriate	gravel or roa	d base.	Grade and	com	pact.
		Inspecto	or Comm	nent		

No Photos

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	16.22	Rating **	М	Issue No.		1561		
LM End	16.22	Issue Type +	En	Location *		CR		
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P Field Study		38.92340	)7°	38.923407°		
пеш				-121.83458	38°	-121.834588 °		
DWR ID						·		

## Inspector Comment

Comment Code

FS\_ID:10203 DS\_ID:20432 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to determine if this is a permitted crossing as it was not previously noted. Need to determine size and depth below the

FIELD\_STRUCT\_DESC: Gas line through levee at unknown depth

below the crown. Marker on WS shoulder.

FS Date: 3/13/2013



Gasline marker on WS shoulder.

# LM Start 16.22 Rating \*\* M Issue No. 1561 (cont) LM End 16.22 Issue Type + En Location \* CR

Photo 2 of 2: UCIP\_FA\_2016\_10203\_17398.jpg



Gasline marker on WS shoulder.

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	17.94	Rating **	М	Issue No.	1554		
LM End	17.94	Issue Type +	En	Location *	CR		
Category				GPS Lat	itud	e/Longitude	
Category		Start End				End	
Itom	DWR UC	P Field Study		38.94297	9°	38.942979°	
пеш	Item				o°	-121.837030 °	
DWR ID	DWR ID						
	Comment Code						

#### Inspector Comment

FS\_ID:11323 DS\_ID:22957 EP\_NO: 18026

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Conduit needs to be located and signs installed

where it crosses the levee crown.

FIELD\_STRUCT\_DESC: Electric Conduit through the levee at unknown

depth. Signage on LS shoulder. (Permit No. 18026, 2007)

FS Date: 3/13/2013



Sign on LS shoulder.

LM Start	18.20	Rating **	М	Issue No.		15		
LM End	18.46	Issue Type +	En	Location *		LS		
Category Earthen Levee				GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Encroachments				74°	38.950263°		
пеш		-121.837528 °		-121.837768 °				
DWR ID	DWR_NA0	016_01_s _ 201	2_15					
		Comn	nent Cod	de				
DT : Ditch								
	Inspector Comment							
Concrete I	Concrete lined ditch runs along the toe of the levee.							



View of the ditch on the landward side of the levee looking upstream. Spring 2016.

\* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

\*\* Rating

A : Acceptable N : Not Inspected/Rated M : Maintenance Deficiancy

C : Corrected Ob : Design & System Obsolescence

U : Unacceptable A/W : Acceptable but Monitor & Maintain

\*\* Rating

A : Acceptable M : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

NA0016

#### Flood Control Project Maintenance Levee Inspections

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	18.48	Rating **	М	Issue No.		113
LM End	18.48	Issue Type +	Ma	Location *		WS
Earthen Levee				GPS La	atitud	e/Longitude
Category				Start		End
Item	Vegetatio	n		38.9505	85°	38.950585 °
пеш		-121.837952 ° -12				
DWR ID	DWR_NA0	016_01_f _ 201	6_113			
		Comn	nent Cod	de		
V2 : Remo slopes.	ve the wild	d growth other	than na	tive grasse	s fro	m the levee
		Inspecto	or Comm	nent		

No Photos

LM Start	18.54	Rating **	М	Issue No.		16
LM End	18.54	Issue Type +	En	Location *		CR
Cotogony	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Item	Encroach	ments		38.9514	00°	38.951400°
пеш				-121.8382	255° -121.838255	
DWR ID	DWR_NA0	016_01_s _ 201	2_16			·
		Comn	nent Coc	de		
BU : Buildi	ng					
		Inspecto	or Comm	nent		
1						



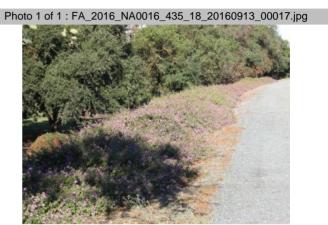
View of the rice mill on the crown of the levee looking upstream. Spring 2016.

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	18.54	Rating **	М	Issue No.		18	
LM End	18.54	Issue Type +	En	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
				Start		End	
Item	n		38.9514	64°	38.951464°		
iteiii				-121.8382	93°	-121.838293 °	
DWR ID DWR_NA0016_01_s _ 2012_18							
		Comn	nent Cod	le			
V6 : Lands	scaping						
		1	0	1			
		Inspecto	or Comm	ient			



Groundcover and trees with irrigation are planted on the levee slope. Fall 2011.

LM Start	18.66	Rating **	М	Issue No.		173		
LM End	18.71	Issue Type +	En	Location *		LS		
Category Earthen Levee				GPS La	atitud	e/Longitude		
				Start		End		
Item	n	38.9527	65°	38.953295°				
item				-121.8396	61°	-121.840241 °		
DWR ID DWR_NA0016_01_s _ 2016_173								
		Comn	nent Cod	de				
V6 : Lands	scaping							
		Inspecto	or Comm	nent				



View of the landscaping on the landward side of the levee looking upstream. Spring 2016.

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	18.66	Rating **	М	Issue No.		173 (cont)	
LM End	18.71	Issue Type +	En	Location *	LS		
Catagonia Earthen Levee				GPS Latitude/Longitude			
Category			Start		End		
Item	n		38.9527	'65 °	38.953295°		
пеш				-121.839661 °		-121.840241 °	
DWR ID DWR_NA0016_01_s _ 2016_173							
		Comn	nent Cod	de			
V6 : Lands	scaping						
		Inspecto	or Comm	nent			

Photo 2 of 2: FA\_2016\_NA0016\_435\_173\_20160929\_00241.jpg



Irrigated landscaping on landside slope of the levee reaching levee crown. Fall 2016 inspection.

LM Start	18.71	Rating **	М	Issue No.	128	
LM End	18.71	Issue Type +	Ма	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory	Category		Start		End	
Item	Trim / Thi	n Trees		38.9532	70°	38.953270°
пеш				-121.8402	32°	-121.840232°
DWR ID	VR ID DWR_NA0016_01_f _ 2015_128					
		Comp	ant Coc	10		

T1: Trim trees to at least five feet above ground level.

Inspector Comment

No Photos

LM Start	18.76	Rating **	М	Issue No.		10	
LM End	18.78	Issue Type +	Ma	Location *		WS	
Category	Suppleme	GPS Latitude/Longitude					
Calegory				Start		End	
Item		ACE Erosion S	Survey,	38.9540	60°	38.954312	0
пеш	DRAFT			-121.8405	60°	-121.840774	0
DWR ID	DWR_NA0	016_01_s _ 201	6_10				
		Comn	nent Coc	le .			

#### Inspector Comment

2009 - Minor erosion, should be repaired under maintenance. 2011 -Some new minor erosion at the toe. 2015: No observed changes. [2015 Site ID: SAC\_111-0\_R]



USACE 2013 Photo #1

\* Location + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence LS : Land Side N : Not Inspected/Rated C : Corrected N/A: Not Applicable A : Acceptable M : Minimally Acceptable WS: Water Side A/W : Acceptable but Monitor & Maintain U : Unacceptable En: Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### **Sacramento River West Side Levee District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	18.83	Rating **	М	Issue No.		22
LM End	18.88	Issue Type +	En	Location * LS		
Category Earthen Levee				GPS La	atitud	e/Longitude
				Start		End
Item	Encroach	ments	38.9547	'56 °	38.955499°	
пеш				-121.841432 °		-121.841271 °
DWR ID DWR_NA0016_01_s _ 2012_22						
		Comn	nent Cod	de		
DT : Ditch						
		Inspecto	or Comm	nent		
concrete lined						

No Photos

-							
LM Start	18.99	Rating **	М	Issue No.		23	
LM End	18.99	Issue Type +	En	Location *		CR	
Category Earthen Levee				GPS La	atitud	e/Longitude	
				Start		End	
Itom	ltem Encroachments				47°	38.956347°	
пеш			-121.839503 °		-121.839503°		
DWR ID	DWR_NA0	016_01_s _ 201	2_23				
		Comn	nent Cod	de			
BU : Build	ing						
		Inspecto	or Comm	nent			



View of the rice mill on the crown of the levee looking upstream. Spring 2016.

	40.40	Rating **	N 4	Issue No.		0.5	
LM Start	19.10	Raung	М	issue ivo.		95	
LM End	19.10	Issue Type +	En	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
				Start		End	
Item	ments	38.9570	21°	38.957021 °			
пеш				-121.837812°		-121.837812°	
DWR ID DWR_NA0016_01_s _ 2015_95							
		Comn	nent Cod	de			
GA : Garba	age						
		Inspecto	or Comm	nent			



View of the debris pile on the landward side of the levee. Spring 2016.

\*Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable CR: Corrected U: Unacceptable A/W: Acceptable but Monitor & Maintain Enforcement

\* Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	19.12	Rating **	М	Issue No.		26
LM End	19.12	Issue Type +	En	Location *		LS
Cotogony	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory	Category					End
Item	Encroach	ncroachments			80°	38.957180°
item					42°	-121.837442°
DWR ID	DWR_NA0016_01_s _ 2012_26					,
		Comn	nent Cod	de		
EQ : Equip	ment					
Inspector Comment						

Photo 1 of 1 : FA\_2016\_NA0016\_435\_26\_20160913\_00020.jpg

View of the equipment on the crown of the levee looking upstream. Beehives have been removed. Spring 2016.

LM Start	19.15	Rating **	М	Issue No.		31
LM End	19.61	Issue Type +	En	Location *		LS
Category	Earthen L	GPS Latitude/Longitude				
Calegory				Start		End
Item	Encroachi	ments		38.9574	05 °	38.962648 °
iteiii				-121.8369	65 °	-121.834368 °
DWR ID	DWR_NA0016_01_s _ 2012_31					
		Comn	nent Cod	le		
DT : Ditch						
Inspector Comment						
Concrete lined ditch up to LM 19.40. Soil ditch continues on until LM 19.61.						



View of the ditch on the landward side of the levee looking upstream. Spring 2016.

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

	1						
LM Start	19.15	Rating **	М	Issue No.		31 (cont)	
LM End	19.61	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Encroachi	ments		38.9574	05°	38.962648 °	
пеш				-121.8369	65 °	-121.834368 °	
DWR ID	DWR ID DWR_NA0016_01_s _ 2012_31						
		Comn	nent Cod	de			
DT : Ditch							
Inspector Comment							
Concrete lined ditch up to LM 19.40. Soil ditch continues on until LM							
19.61.	19.61.						

# Photo 2 of 2 : FA\_2016\_NA0016\_435\_31\_20160913\_00026.jpg

Concrete lined ditch stops at levee mile 19.40.

LM Start	19.37	Rating **	М	Issue No.		96	
LM End	19.37	Issue Type +	En	Location *		WS	
Catagory	Category Earthen Levee				atitud	le/Longitude	
Calegory						End	
Item	Encroach		38.9596	42°	38.959642°		
пеш			-121.8340	04°	-121.834004°		
DWR ID	DWR_NA0	016_01_s _ 201	5_96				
		Comn	nent Coc	de			
BU : Buildi	ng						
Inspector Comment							



View of the building on the waterward side of the levee looking upstream. Spring 2015.

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	19.50	Rating **	М	Issue No.		1568				
LM End	19.50	Issue Type + En Location *		Issue Type + En Location *		Location *		Location *		WS
Category	Suppleme	ental	GPS Latitude/Longitude							
Calegory				Start		End				
Item	DWR UCI	P Field Study		38.96122	1 °	38.961221°				
пеш				-121.83323	o°	-121.833230°				
DWR ID										

#### Inspector Comment

Comment Code

FS\_ID:10253 DS\_ID:20246 EP\_NO: 1507

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe appears abandoned. Needs to be abandoned

properly.

FIELD\_STRUCT\_DESC: 14-inch steel irrigation pipe through levee 8.4 feet below crown. Gate valve on the waterward side, siphon breaker in 24-inch CMP riser on the landward slope. Concrete distribution box in irrigation ditch at the toe of the landward slope (Permit No. 1507,

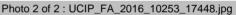
1959). Included in the 1960 O&M manual.

FS Date: 3/13/2013

LM Start	19.50	Rating **	М	Issue No.	1568 (cont)
LM End	19.50	Issue Type +	En	Location *	WS



CMP Riser on shoulder and concrete distribution box under heavy blackberry cover at LS toe.





Concrete distribution box under heavy blackberry cover at LS toe.

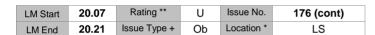
#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	20.07	Rating **	U	Issue No.		176
LM End	20.21	Issue Type +	Ob	Location *		LS
Category	Earthen Levee				atitud	e/Longitude
Calegory				Start		End
Item	Seepage .	/ Sandboils		38.968952°		38.970733°
item	item			-121.835239 °		-121.833896°
DWR ID	DWR_NA0	016_01_s _ 201	6_176			
		Comn	nent Cod	de		
Inspector Comment						
Seepage area has been staked and noted by LMA. Monitor seepage						

Seepage area has been staked and noted by LMA. Monitor seepage site.





View of the seepage on the landward side of the levee looking upstream. Spring 2016.

Photo 2 of 2: FA\_2016\_NA0016\_435\_176\_20160913\_00099.jpg



Monitoring stake for the seepage. Spring 2016.

-							
LM Start	20.92	Rating **	М	Issue No.		32	
LM End	22.08 Issue Type + En			Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Encroachments					38.989476 °	
item			-121.822286 °		-121.816760°		
DWR ID DWR_NA0016_01_s _ 2012_32							
		Comn	nent Cod	de			
DT : Ditch							
		Inspecto	or Comm	nent			

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### **Levee Inspection Report By Mile - Fall 2016**

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	20.98	Rating **	С	Issue No.		177	
LM End	20.98	Issue Type +	Ma	Location *	WS		
Earthen Levee				GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Encroachi	ments		38.9756	69°	38.975669°	
пеш				-121.8217	46°	-121.821746°	
DWR ID	DWR_NA0	016_01_s _ 201	6_177				
		Comn	nent Cod	de			
TR : Tree	or limb						
		Inspecto	or Comm	nent			

No Photos

LM Start	21.89	Rating **	М	Issue No.		179	
LM End	21.89	Issue Type +	Ма	Location *		LS	
Category	evee	GPS La	titud	e/Longitude			
Calegory	Salegory					End	
Item	Animal Co	nimal Control			49°	38.988449 °	
пеш				-121.8200	09°	-121.820009 °	
DWR ID	DWR_NA0	016_01_s _ 201	6_179				
Comment Code							
A3 : No rodents visible, but rodent burrows visible; need to backfill and							

compact or grout burrows.

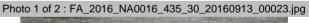
Inspector Comment

#### Photo 1 of 1: FA\_2016\_NA0016\_435\_179\_20160913\_00101.jpg



View of the rodent hole on the landward side of the levee looking upstream. Spring 2016.

LM Start	22.12	Rating **	A/W	Issue No.		30			
LM End	22.42	Issue Type +	Ob	Location *		WS			
Category Earthen Levee				GPS La	atitud	e/Longitude			
Category				Start		End			
Item	Vegetatio	า		38.9895	28°	38.989722°			
пеш				-121.8160	20°	-121.810488 °			
DWR ID	DWR ID DWR_NA0016_01_s _ 2012_30								
		Comn	nent Cod	de					
V8 : Enviro	nmental F	dequirements.							
		Inspecto	or Comm	nent					





Revegetation site. Photo taken spring 2012.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

				II.				
LM Start	22.12	Rating **	A/W	Issue No.		30 (cont)		
LM End	22.42	Issue Type +	Ob	Location *	WS			
Category Earthen Levee				GPS La	atitud	le/Longitude		
Category				Start		End		
Item	Vegetatio	n		38.9895	28°	38.989722°		
item				-121.8160	20°	-121.810488°		
DWR ID DWR_NA0016_01_s _ 2012_30								
		Comn	nent Cod	de				
V8 : Enviro	onmental F	Requirements.						
		Inspecto	or Comm	nent				



View of the revegetation on the waterward berm of the levee looking upstream. Spring 2016.

LM Start	22.71	Rating **	М	Issue No.		1576		
LM End	22.71	Issue Type +	En	Location *		WS		
Category	Category Supplemental				GPS Latitude/Longitu			
Calegory		Start		End				
Item	DWR UCI	P Field Study		38.9898	62°	38.989862°		
item				-121.8052	43°	-121.805243°		
DWR ID								

## Comment Code

#### Inspector Comment

FS\_ID:10266 DS\_ID:20248 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe needs to be verified as having been properly

abandoned

FIELD\_STRUCT\_DESC: 24-inch pipe through levee 19.5 feet below crown. Abandoned concrete pumphouse on waterward toe. Originally

included in the 1960 O&M manual.

FS Date: 3/14/2013

#### Photo 1 of 2: UCIP\_FA\_2016\_10266\_17490.jpg



Concrete pumphouse on WS berm.

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	22.71	Rating **	М	Issue No. 1		1576 (cont)		
LM End	22.71	Issue Type +	En	Location *		WS		
Category	Supplemental				titud	le/Longitude		
Calegory		Start		End				
Item	DWR UCI	P Field Study		38.98986	62 °	38.989862	0	
пеш				-121.80524	43 °	-121.805243	0	
DWR ID								
	Comment Code							

#### Inspector Comment

FS\_ID:10266 DS\_ID:20248 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe needs to be verified as having been properly

abandoned.

FIELD\_STRUCT\_DESC: 24-inch pipe through levee 19.5 feet below crown. Abandoned concrete pumphouse on waterward toe. Originally

included in the 1960 O&M manual.

FS Date: 3/14/2013



Concrete box on LS toe.

LM Start	22.89	Rating **	М	Issue No.		130	
LM End	22.89	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End	
Item	Trim / Thi	n Trees		38.9903	24 °	38.990324°	
пеш				-121.8019	05 °	-121.801905°	
DWR ID	DWR_NA0016_01_f _ 2015_130						
Comment Code							

T1: Trim trees to at least five feet above ground level.

Inspector Comment

No Photos

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	23.55	Rating **	М	Issue No.		11	
LM End	23.65	Issue Type +	Ма	Location *		WS	
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item		CE Erosion S	Survey,	38.9976	96°	38.998336°	
item	DRAFT			-121.7975	84°	-121.799298°	
DWR ID DWR_NA0016_01_s _ 2016_11							
Comment Code							

#### Inspector Comment

2008 - Slippage of cobbles off hard underlying toe material. 2011 - Minor slumping site. 2012 - Failing cobble site, site extended upstream. 2015: No observed changes. [2015 Site ID: SAC\_115-9\_R]



USACE 2013 Photo #1

LM Start	23.70	Rating **	М	Issue No.		1569
LM End	23.70	Issue Type +	En	Location *		WS
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		38.9982	47°	38.998247 °
пеш				-121.8002	36°	-121.800236°
DWR ID						•

## Comment Code

#### Inspector Comment

FS\_ID:10261 DS\_ID:20249 EP\_NO: 9374

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Appears abandoned. Pipe should be properly

abandoned.

FIELD\_STRUCT\_DESC: 1 of 4: 36-inch corrugated metal pipe through levee 20.0 feet below crown. One corrugated metal cutoff wall installed by United States Army Corp of Engineers, 1955. Slide gate in 36-inch corrugated metal riser on the waterward slope. Pump on the waterward bank. Concrete standpipe at toe of the landward slope (ABO No. 9374, 1974). Originally included in the 1960 O&M manual.

FS Date: 3/14/2013

#### Photo 1 of 2: UCIP\_FA\_2016\_10261\_17466.jpg



36-inch cmp riser on WS slope with slide gate.

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	23.70	Rating **	М	Issue No.	No. 1569 (con		
LM End	23.70	Issue Type +	En	Location *	cation * WS		
Supplemental				GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UC	P Field Study		38.9982	47°	38.998247°	
пеш				-121.8002	36°	-121.800236 °	
DWR ID						·	
	Comment Code						

## Inspector Comment

FS\_ID:10261 DS\_ID:20249 EP\_NO: 9374

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Appears abandoned. Pipe should be properly

abandoned.

FIELD\_STRUCT\_DESC: 1 of 4: 36-inch corrugated metal pipe through levee 20.0 feet below crown. One corrugated metal cutoff wall installed by United States Army Corp of Engineers, 1955. Slide gate in 36-inch corrugated metal riser on the waterward slope. Pump on the waterward bank. Concrete standpipe at toe of the landward slope (ABO No. 9374,

1974). Originally included in the 1960 O&M manual.

FS Date: 3/14/2013



Concrete distribution riser on LS toe.

LM Start	24.54	Rating **	С	Issue No.		185		
LM End	24.58	Issue Type +	Ma	Location *		CR		
Category Earthen Levee				GPS Latitude/Longitude				
Category			Start		End			
Item		rface / Depres	ssions /	39.005160°		39.005311°		
itom	Rutting			-121.812720 °		-121.813332°		
DWR ID	DWR_NA0	016_01_s _ 201	6_185					
		Comn	nent Coo	de				
C3: Add a	ppropriate	gravel or roa	d base.	Grade and	com	pact.		
	Inspector Comment							

No Photos

#### **Levee Inspection Report By Mile - Fall 2016**

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	24.73	Rating **	М	Issue No.		1575	
LM End	24.73	Issue Type +	En	Location *		CR	
Category				GPS Latitude/Longitude			
Category	ory			Start		End	
Item	DWR UC	P Field Study		39.0050	97°	39.005097°	
пеш				-121.8161	16°	-121.816116°	
DWR ID							
	Comment Code						

## Inspector Comment

FS\_ID:10265 DS\_ID:20251 EP\_NO: 9328

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Appears abandoned. Needs to be abandoned

properly.

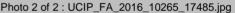
FIELD\_STRUCT\_DESC: 24-inch corrugated metal pipe through levee 20.0 feet below crown. Slide gate in 36-inch corrugated metal riser unit on the waterward slope. 7'X9' Distribution box at toe of the landward slope (ABO. No. 9328, 1960)

FS Date: 3/14/2013

LM Start	24.73	Rating **	М	Issue No.	1575 (cont)
LM End	24.73	Issue Type +	En	Location *	CR



Slide gate in 36-inch CMP riser on WS slope.





7-foot by 9-foot distribution box at LS toe.

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	24.93	Rating **	С	Issue No.		34	
LM End	24.93	Issue Type +	Ma	Location *	CR		
Category	Earthen L	evee		GPS L	atitud	e/Longitude	
Calegory				Start		End	
Itom	ltem Crown Surface / Depressions / Rutting				802°	39.005802°	
пеш					54°	-121.819654°	
DWR ID	DWR_NA0	016_01_s _ 201	6_34				
		Comn	nent Cod	de			
C2 : Repai	ir depressi	ons or ruts in	the crow	n or slope.			
		Inspecto	or Comm	nent			

No Photos

LM Start	25.70	Rating **	U	Issue No.		188	
LM End	25.73	Issue Type +	Ob	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory			Start		End		
Item	Seepage .	/ Sandboils		39.0139	14°	39.014355°	
пеш				-121.8266	61 °	-121.826329°	
DWR ID	DWR ID DWR_NA0016_01_s _ 2016_188						
Comment Code							

#### Inspector Comment

Seems to be seepage through the levee. Appears that no sloughing has occurred. Recommend monitoring this site.

## Photo 1 of 1 : FA\_2016\_NA0016\_435\_188\_20160913\_00103.jpg



View of the seepage on the landward side of the levee looking upstream. Spring 2016.

LM Start	25.75	Rating **	М	Issue No.		12
LM End	25.91	Issue Type +	Ма	Location *	WS	
Category Supplemental			GPS Latitude/Longitude			
Category			Start		End	
Item		ACE Erosion S	Survey,	39.01449	99°	39.016401
пеш	DRAFT			-121.82588	30°	-121.824230
DWR ID DWR_NA0016_01_s _ 2016_12						
		Comp	ant Coc	10		

#### Inspector Comment

2008 - Whole bank is eroding, nearly vertical slope with cohesive toe. Bed is very deep along the toe (greater than 30 ft deep at 20 ft from the shore). 2011 - Some new minor erosion. 2015: No observed changes. [2015 Site ID: SAC\_118-0\_R]

#### Photo 1 of 1: FA\_2016\_NA0016\_435\_12\_20160913\_00012.jpg



USACE 2013 Photo #1

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	26.46	Rating **	М	Issue No.		1555		
LM End	26.46	Issue Type +	En	Location *	WS			
Category				GPS Latitude/Longitude				
Category			Start		End			
Item	DWR UC	P Field Study		39.0238	42 °	39.023842°		
пеш				-121.8230	77°	-121.823077 °		
DWR ID								
Comment Code								

#### Inspector Comment

FS\_ID:10285 DS\_ID:20253 EP\_NO: 9136

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe appears to be abandoned. Pipe needs to be abandoned properly.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 18-inch steel pipe through levee 3.0 feet below crown. Steel cutoff wall at centerline. Air release valve on the waterward shoulder (Permit No. 9136, 1974). Slide gate in 72-inch diameter CMP riser on LS toe.

FS Date: 3/14/2013

LM Start	26.46	Rating **	М	Issue No.	1555 (cont)
LM End	26.46	Issue Type +	En	Location *	WS

#### Photo 1 of 2 : UCIP\_FA\_2016\_10285\_17532.jpg



72-inch CMP riser on LS toe under JP next to tree.

#### Photo 2 of 2: UCIP\_FA\_2016\_10285\_17531.jpg



Air release valve on WS shoulder.

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	27.46	Rating **	М	Issue No.		1557	
LM End	27.46	Issue Type +	En	Location *		WS	
Category	ental	GPS La	titud	e/Longitude			
Category			Start		End		
Item	DWR UCI	P Field Study		39.03376	7°	39.033767	0
пеш				-121.83311	0 °	-121.833110	0
DWR ID							

#### Inspector Comment

Comment Code

FS\_ID:10289 DS\_ID:20256 EP\_NO: 9368

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to abandon pipe properly.
FIELD\_STRUCT\_DESC: 24-inch steel pipe through levee 16.2 feet below crown (ABO No. 9368, 1960) Pump on the waterward bank. Gate valve on the landward end. Concrete box at the landward toe of the slope. Irrigation well 6 feet from toe of landward slope. Originally included in the 1960 O&M manual with the description standpipe on waterward side.

FS Date: 3/14/2013

LM Start	27.46	Rating **	М	Issue No.	1557 (cont)
LM End	27.46	Issue Type +	En	Location *	WS



gate valve off landside toe.





steel standpipe on WS toe.

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	27.46	Rating **	М	Issue No.	1558		
LM End	27.46	Issue Type +	En	Location *	WS		
Category				GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UCI	P Field Study		39.03381	4 °	39.033814°	
пеш		-		-121.83315	8°	-121.833158 °	
DWR ID							
Comment Code							

#### Inspector Comment

FS\_ID:10290 DS\_ID:20416 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Appears this pipe is abandoned and visible on WS

slope in pieces. Need to verify proper abandonment.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch pipe through levee 6.2 feet below crown. Originally included in the 1960 O&M manual.

Pipe debris on WS slope. FS Date: 3/14/2013

LM Start	27.46	Rating **	М	Issue No.	1558 (cont)
LM End	27.46	Issue Type +	En	Location *	WS



Pipe debris on WS slope.



Pipe debris on WS slope.

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#### Flood Control Project Maintenance Levee Inspections

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	27.52	Rating **	С	Issue No.		190				
LM End	27.52	Issue Type +	Ma	Location *		CR				
Category	Earthen L	evee		GPS La	atitud	e/Longitude				
Calegory						End				
Item	Erosion / Bank Caving			39.0345	92°	39.034592°				
item				-121.833463 °		-121.833463 °				
DWR ID	DWR_NA0	016_01_s _ 201	6_190							
		Comn	nent Cod	de						
E1: Note a	and monito	r erosion site								
Inspector Comment										
Sinkhole on the crown of the waterward shoulder of the levee. Hole is about 15 inches wide and 8 inches deep.										

No Photos

LM Start	27.54 Rating **		М	Issue No.		1559		
LM End	27.54	Issue Type +	En	Location *		CR		
Category				GPS Latitude/Longitude				
Calegory				Start		End		
ltom	Item DWR UCIP Field Study			39.03487	70°	39.034870°		
пеш				-121.83350	)1 °	-121.833501°		
DWR ID								

## Comment Code

#### Inspector Comment

FS\_ID:10291 DS\_ID:20257 EP\_NO: 9355

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe needs to be properly abandoned.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch steel pipe through levee 14.0 feet below crown. Slide gate on the waterward end, gate valve on the landward end (ABO No. 9355, 1960). Originally included in

the 1960 O&M manual. FS Date: 3/14/2013

#### Photo 1 of 2: UCIP\_FA\_2016\_10291\_17548.jpg



Gate valve buried on LS toe.

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

59

LM Start	27.54	Rating **	М	Issue No.		559 (cont)	
LM End	27.54	Issue Type +	En	Location *	* CR		
Category			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UC	P Field Study		39.03487	0 °	39.034870	0
пеш				-121.83350	1 °	-121.833501	0
DWR ID							

#### Inspector Comment

Comment Code

FS\_ID:10291 DS\_ID:20257 EP\_NO: 9355

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe needs to be properly abandoned.

Rating \*\*

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch steel pipe through levee 14.0 feet below crown. Slide gate on the waterward end, gate valve on the landward end (ABO No. 9355, 1960). Originally included in

the 1960 O&M manual. FS Date: 3/14/2013

28 02

I M Start



Gate valve buried on LS toe.

LIVI Start	20.02	rtating	IVI	10000 110.		33	
LM End	28.02	Issue Type +	En	Location *		WS	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
ltem Encroachments			39.0407	'50 °	39.040750°		
				-121.835299 °		-121.835299°	
DWR ID	DWR_NA0	016_01_s _ 201	2_59				
		Comn	nent Cod	de			
DE : Debri	S						
		Inspecto	or Comm	nent			
piles of co	ncrete						



View of the pile of concrete on the waterward berm of the levee. Spring 2016.

\*Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated
M: Minimally Acceptable
C: Corrected
M: Minimally Acceptable
D: Unacceptable
AW: Acceptable but Monitor & Maintain

\* Issue Type
Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	28.61	Rating **	М	Issue No.		1588	
LM End	28.61	Issue Type +	En	Location *	WS		
Category			GPS Latitude/Longitude				
Category				Start		End	
Item	DWR UC	DWR UCIP Field Study			8°	39.047758°	
пеш				-121.84091	4 °	-121.840914°	
DWR ID							
	Comment Code						

#### Inspector Comment

FS\_ID:49833 DS\_ID:20319 EP\_NO: 16632

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 09/01/2016 - No markers on levee. no condition in permit for markers. Pipe is well underneath the levee prism with minimum clearance under the river of 35 feet per permit drawings. (T. Hatch/UCIP) 03/15/2013 No gasline markers on either side of levee. (W. Wylie/UCIP)

FIELD\_STRUCT\_DESC: 4-inch welded steel natural gas pipeline through the levee, 62.0 feet below crown. Crosses under both levees and the Sacramento River channel with a minimum clearance of 35 feet (Permit No. 16632, 1999 - SECI). Gas well visible approximately 1500-feet west of the levee on the landside (LS).

FS Date: 9/1/2016



gas well 1500-feet west of this location.

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	28.78	Rating **	U	Issue No.		1590	
LM End	28.78	Issue Type +	En	Location *		WS	
Category			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	DWR UCI	P Field Study		39.05018	6 °	39.050186	
пеш					3°	-121.841553	
DWR ID							

## Inspector Comment

Comment Code

FS\_ID:50042 DS\_ID:20311 EP\_NO: 12609 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 09/23/2016 - pipe outlet still submerged, but visible enough to determine that flap gate is still missing. Appurtenances on the LS of the levee do not appear to be associated with this pipe. There is no visible location for collection of drainage water to go through the outfall. As a result, it does not appear that this pipe is in use. (T. Hatch/UCIP) 09/01/201 - pipe outlet was submerged at time of inspection. Unable to view if flap gate had been replaced. Otherwise, conditions do not appear to be significantly different from previous inspection. (T. Hatch/UCIP) 03/15/201- Flap gate missing from waterward end of pipe. (W. Wylie/UCIP)

FIELD\_STRUCT\_DESC: 24-inch steel outfall pipe through the levee, 4.1 feet below the crown. There is a siphon breaker in an 18-inch concrete riser on the waterside (WS) shoulder. A flap gate is located on the WS toe. The riverbank has rock protection at the WS toe of the levee (Permit No. 12609, 1979 - Gross).

FS Date: 9/23/2016

LM Start	28.78	Rating **	U	Issue No.	1590 (cont)
LM End	28.78	Issue Type +	En	Location *	WS

#### Photo 1 of 2: UCIP\_FA\_2016\_50042\_17587.jpg



18-inch concrete riser on WS shoulder.

Photo 2 of 2: UCIP\_FA\_2016\_50042\_17586.jpg



Pipe and flap gate at rivers edge

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	28.87	Rating **	С	Issue No.		133	
LM End	28.87	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS La	atitud	e/Longitude		
Category				Start		End	
Itom	Animal Control			39.0515	71°	39.051571°	
item				-121.8418	71°	-121.841871 °	
DWR ID	DWR_NA0016_01_f _ 2015_133						
		Comn	nent Coo	de			
A2 : Repai animal acc		slope damag	jed by liv	estock and	pre	vent large	
		Inspecto	or Comm	nent			
1							

No Photos

LM Start	29.38	Rating **	С	Issue No.		195			
LM End	29.38	Issue Type +	Ma	Location *		WS			
Category	Earthen Levee			GPS Latitude/Longitude					
Category				Start		End			
Item	Encroach	Encroachments			83°	39.058783	0		
пеш				-121.8405	72°	-121.840572	0		
DWR ID	DWR_NA0016_01_s _ 2016_195								
	Comment Code								
TR : Tree	or limb								

No Photos

Inspector Comment

LM Start	29.58	Rating **	U	Issue No.		197	
LM End	29.66	Issue Type +	Ob	Location *		LS	
Category Earthen Levee			GPS Latitude/Longitude				
Category			Start		End		
Item	Seepage .	Seepage / Sandboils			09°	39.062799°	
item				-121.8398	38°	-121.839564°	
DWR ID DWR_NA0016_01_s _ 2016_197							
	Comment Code						

#### Inspector Comment

Seepage area has been staked and noted by LMA. Monitor seepage site.

#### Photo 1 of 2: FA\_2016\_NA0016\_435\_197\_20160913\_00106.jpg



View of the seepage into the ditch on the landward side of the levee looking upstream. Spring 2016.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	29.58	Rating **	U	Issue No.	197 (cont)		
LM End	29.66	Issue Type +	Ob	Location *	LS		
Category	Earthen L	evee	GPS Latitude/Longitude				
Category			Start		End		
Item	Seepage / Sandboils			39.0617	09°	39.062799	)°
пеш				-121.839838 °		-121.83956	1°
DWR ID	DWR_NA0	016_01_s _ 201	6_197				
		Comn	nent Cod	de			

#### Inspector Comment

Seepage area has been staked and noted by LMA. Monitor seepage site.

# Photo 2 of 2 : FA\_2016\_NA0016\_435\_197\_20160913\_00107.jpg



Monitoring stake is on the waterward side of the levee. Spring 2016.

Photo 1 of 1: FA\_2016\_NA0016\_435\_2\_20160913\_00002.jpg

LM Start	29.69	Rating **	A/W	Issue No.		2		
LM End	29.73	Issue Type +	Ma	Location *	WS			
Category				GPS Latitude/Longitude				
Category			Start		End			
Item	2015 USACE Erosion Survey,			39.06320	)9°	39.063997°		
item	DRAFT			-121.838927 °		-121.839335°		
DWR ID DWR_NA0016_01_s _ 2016_2								
Comment Code								

#### Inspector Comment

1997 - Mass failure of the lower cohesive bank and toe. 2000 - Still eroding, steeply dipping foresets in the toe are falling off. 2010 - Some new erosion and some new deposition. Eddy current off the upstream rock. 2011 - Still plenty of berm left. 2015: No observed changes. [2015 Site ID: SAC\_122-0\_R]

AVAN			
the distance of the	Company of the	. /	

USACE 2013 Photo #1

LM Start	29.70	Rating **	С	Issue No.		198	
LM End	29.70	Issue Type +	Ма	Location *		WS	
Category Earthen Levee			GPS Latitude/Longitude				
Category			Start		End		
Encroachments ltem			39.063424°		39.063424°		
item				-121.8395	97 °	-121.839597°	
DWR ID	DWR_NA0	016_01_s _ 201	6_198				
Comment Code							
TR : Tree	or limb						

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

NA0016

#### Flood Control Project Maintenance Levee Inspections

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	29.96	Rating **	М	Issue No.		13	
LM End	30.00	Issue Type +	Ma	Location *	WS		
Category	Supplemental			GPS Latitude/Longitude			
Category		Start		End			
ltom	2015 USACE Erosion Survey,			39.065886°		39.066287	o
Item DRAFT			-121.8429	50°	-121.843602	D	
DWR ID DWR_NA0016_01_s _ 2016_13							
	Comment Code						

#### Inspector Comment

2002 - Upstream end has recent slope failure and exposure of tree roots. 2003 - Some new minor slope erosion with new snags on the bank. 2004 - Appears a little worse. 2005 - Scallop in bank at the upstream end looks worse. 2009 - Minimal new erosion, Berm width is still large, but one large event or one fallen tree and it could go fast. 2010 - New erosion, bank is nearly all vertical from slumping. Site looks bad. 2011 - Site continues to look bad. 2012 - Minor new erosion. 2015: Undermining of toe rock. [2015 Site ID: SAC\_122-3\_R]



USACE 2013 Photo #1

LM Start	30.08	Rating **	М	Issue No.		1560		
LM End	30.08	Issue Type +	En	Location *		WS		
Category	Supplemental				GPS Latitude/Longitude			
Category			Start		End			
Item	DWR UC	IP Field Study		39.0667	49°	39.066749°		
пеш				-121.8449	87 °	-121.844987°		
DWR ID								

#### Comment Code

#### Inspector Comment

FS\_ID:10325 DS\_ID:20317 EP\_NO: 14495

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe may need flap gate at water side.

FIELD\_STRUCT\_DESC: 22-inch steel storm drain pipe through levee 3.8 feet below crown. Pipe extends from existing pumphouse located at the landward toe through the levee to the low water channel Siphon breaker in 24-inch CMP riser on LS shoulder. (Permit No. 14495, 1987). Replaced 12-inch and 16-inch pipes installed under Permit No. 9358.

FS Date: 3/15/2013



24-inch pipe at rivers edge

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	30.08	Rating **	М	Issue No.	Issue No. 1560 (c		
LM End	30.08	Issue Type +	En	Location *	WS		
Category			GPS Latitude/Longitude				
Calegory	alegory			Start		End	
Item	DWR UCIP Field Study			39.06674	9°	39.066749°	
пеш				-121.84498	7°	-121.844987 °	
DWR ID							
	Comment Code						

#### Inspector Comment

FS\_ID:10325 DS\_ID:20317 EP\_NO: 14495

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe may need flap gate at water side.

FIELD\_STRUCT\_DESC: 22-inch steel storm drain pipe through levee 3.8 feet below crown. Pipe extends from existing pumphouse located at the landward toe through the levee to the low water channel Siphon breaker in 24-inch CMP riser on LS shoulder. (Permit No. 14495, 1987). Replaced 12-inch and 16-inch pipes installed under Permit No. 9358.

FS Date: 3/15/2013



Siphon breaker in 24-inch cmp on LS shoulder.

LM Start	30.15 Rating ** C		С	Issue No.		199
LM End	30.15	Issue Type +	Ma	Location *	WS	
Category Earthen Levee			GPS Latitude/Longitude			
Category	alegory			Start		End
Itom	ltem Encroachments			39.06742	6°	39.067426°
item				-121.84592	8°	-121.845928 °
DWR ID						
Comment Code						

TR: Tree or limb

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side	A : Acceptable M : Minimally Acceptable	N : Not Inspected/Rated C : Corrected	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	30.24	Rating **	U	Issue No.		201
LM End	30.24	Issue Type +	Ob	Location *		LS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Calegory				Start		End
Item	Seepage /	Sandboils		39.0684	80°	39.068480°
item				-121.8470	61 °	-121.847061 °
DWR ID DWR_NA0016_01_s _ 2016_201						
		Comn	nent Cod	de		
Inspector Comment						
Boil has clear water running through. Continue to monitor						

LM Start	30.24	Rating **	U	Issue No.	201 (cont)
LNAFad	20.24	Iccuo Typo +	Oh	Location *	1.0



Boil has clear water running through. Spring 2016.

Photo 2 of 3: FA\_2016\_NA0016\_435\_201\_20160913\_00112.jpg



Perspective view of the boil at the toe road on the landward side of the levee. Spring 2016.

LM Start	30.24	Rating **	U	Issue No.	201 (cont)
LM End	30.24	Issue Type +	Ob	Location *	LS



Monitoring stake was placed on 3/15/16. Spring 2016.

\*Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A: Acceptable but Monitor & Maintain Enforcement

\* Issue Type

Ma: Maintenance Deficiancy

Ob: Design & System Obsolescence

En: Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### **Sacramento River West Side Levee District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	30.25	Rating **	U	Issue No.		200
LM End	30.25	Issue Type +	Ob	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Seepage /	/ Sandboils		39.0685	42°	39.068542°
item				-121.847131 °		-121.847131 °
DWR ID DWR_NA0016_01_s _ 2016_200						
		Comn	nent Cod	de		
		Inspecto	or Comm	nent		
LMA has stakes on the levee monitoring seepage site.						

Photo 1 of 2 : FA_2016_NA0016_435_200_20160913_00109.jpg
and the second second
AV 10
08/15/2018

View of the seepage on the landward side of the levee looking upstream. Spring 2016.

 LM Start
 30.25
 Rating \*\*
 U
 Issue No.
 200 (cont)

 LM End
 30.25
 Issue Type +
 Ob
 Location \*
 LS

Photo 2 of 2: FA\_2016\_NA0016\_435\_200\_20160913\_00110.jpg



Stake is used to monitor seepage. Spring 2016.

LM Start	30.28	Rating **	U	Issue No.		79
LM End	30.28	Issue Type +	Ма	Location *	LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Item	Animal Co	ontrol		39.0689	49°	39.068949°
item			-121.8475	51 °	-121.847551 °	
DWR ID DWR_NA0016_01_f _ 2016_79						
		Comn	nent Cod	de		
A1 : Exterminate rodents and backfill and compact or grout burrows.						
Inspector Comment						



Burrows on landside slope. Most likely fox holes. Fall 2016 inspection.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	30.46	Rating **	Α	Issue No.	202		
LM End	30.46	Issue Type +	Ob	Location *	LS		_
Category Earthen Levee				GPS La	atitud	le/Longitude	
				Start		End	
Item	Seepage	/ Sandboils		39.0706	73°	39.070673	0
item				-121.8499	35°	-121.849935	0
DWR ID	DWR_NA0016_01_s _ 2016_202						
Comment Code							

#### Inspector Comment

Sandboil about 2 inches wide is spitting out material. LMA has sandbagged the boil.

LM Start	30.46	Rating **	Α	Issue No.	202 (cont)
LM End	30.46	Issue Type +	Ob	Location *	LS



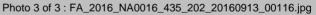
View of the monitoring stake and boil at the toe of the levee on the landward side. Spring 2016.

#### Photo 2 of 3: FA\_2016\_NA0016\_435\_202\_20160913\_00115.jpg



Boil is about 2 inches wide. Spring 2016.

LM Start	30.46	Rating **	Α	Issue No.	202 (cont)
LM End	30.46	Issue Type +	Ob	Location *	LS





LMA has constructed sack ring around the boil and will continue to monitor it. Spring 2016.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	30.86	Rating **	С	Issue No.		135
LM End	30.86	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Animal Co		39.0684	82°	39.068482°	
item				-121.8566	39°	-121.856639°
DWR ID	DWR_NA0	016_01_f _ 201	5_135			·
		Comn	nent Cod	de		
A3 : No roo compact o		le, but rodent rows.	burrows	visible; ne	ed to	backfill and
		Inspecto	or Comm	nent		

No Photos

LM Start	30.86	Rating **	С	Issue No.		203	
LM End	30.86	Issue Type +	Ma	Location *		WS	
Category Earthen Levee				GPS La	GPS Latitude/Longitude		
Calegory			Start		End		
Item	Encroach	ments	39.0684	65°	39.068465	0	
пеш				-121.8567	06°	-121.856706	0
DWR ID	DWR_NA0	016_01_s _ 201					
Comment Code							
TR: Tree or limb							

Inspector Comment

No Photos

LM Start	31.28	Rating **	М	Issue No.	99			
LM End	31.28	Issue Type +	En	Location *	WS			
Catagory Earthen Levee				GPS Lat	itud	le/Longitude		
Category				Start		End		
Item	Encroachments			39.06692	1°	39.066921 °		
item				-121.86407	7°	-121.864077°		
DWR ID	ID DWR_NA0016_01_s _ 2015_99							
	Commant Code							

Comment Code

BU: Building

Inspector Comment

Temporary bee hives.

# Photo 1 of 1: FA\_2016\_NA0016\_435\_99\_20160913\_00042.jpg



View of the beehives on the shoulder of the waterward side of the levee looking upstream. Spring 2015.

\* Location + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence LS: Land Side N/A: Not Applicable A : Acceptable
M : Minimally Acceptable
U : Unacceptable N : Not Inspected/Rated C : Corrected WS: Water Side A/W : Acceptable but Monitor & Maintain En: Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	31.43	Rating **	М	Issue No.	17	
LM End	31.45	Issue Type +	Ма	Location *	WS	
Catagory	Category Supplemental			GPS La	atitud	le/Longitude
Calegory				Start		End
2015 USACE Erosion Survey,			39.0670	04°	39.066901°	
item	m DRAFT				13°	-121.867322 °
DWR ID	DWR_NA0	016_01_s _ 201	6_17			
		Comn	nent Coc	de		
	Inspector Comment					

1997 - Erosion into the levee section; old concrete rubble loss at toe; transition between the rock upstream and the cobble downstream. 2000 - Cohesive bench with concrete slabs on top; 25 ft deep scour hole on the downstream end. 2015: No observed changes. [2015 Site ID: SAC\_123-7\_R]

Photo 1 of 1 : FA_2	016_NA0016	_435_17_201	60913_00016	6.jpg
- 41.				

USACE 2013 Photo #1

LM Start	31.61	Rating **	М	Issue No.		80	
LM End	31.61	Issue Type +	Ma	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory			Start		End		
Slope Stability				39.066176°		39.066176°	
пеш				-121.870146°		-121.870146°	
DWR ID	D DWR_NA0016_01_f _ 2016_80						
Comment Code							

S2: Repair the levee slope damaged by foot traffic and prevent access where possible.

#### Inspector Comment

#### Photo 1 of 1: FA\_2016\_NA0016\_435\_80\_20160929\_00244.jpg



Slope stability issue at the wall of the building. Waterside slope. Fall 2016 inspection.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

NA0016

#### **Flood Control Project Maintenance** Levee Inspections

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	31.61	Rating **	М	Issue No.		1562	
LM End	31.61	Issue Type +	En	Location *		WS	
Category				GPS Latitude/Longitude			
Calegory			Start		End		
DWR UCIP Field Study				39.066163°		39.066163°	
пеш	Item				98°	-121.870198°	
DWR ID							
Comment Code							

#### Inspector Comment

FS\_ID:11543 DS\_ID:20262 EP\_NO: 9338

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe leaking at intake pipe on rivers edge below pump FIELD\_STRUCT\_DESC: 24-inch steel pipe through levee 24.0 feet below crown (ABO No. 9338, 1960). Slide gate in abandoned concrete pump house on the waterward slope. Three slant pumps mounted on pile structure on the waterward bank. 30-inch concrete pipe under the highway on the landside. 48-inch steel riser on the landside of highway. Overhead high tower power line crosses the levee. Power line has been run underground to service box on waterward shoulder at L.M. 32.01. Ramps on both slopes. Originally included in the 1960 O&M manual. FS Date: 3/15/2013

LM Start	31.61	Rating **	М	Issue No.	1562 (cont)
LM End	31.61	Issue Type +	En	Location *	WS

## Photo 1 of 2: UCIP\_FA\_2016\_11543\_18942.jpg



Concrete block houe with slide gate inside.

#### Photo 2 of 2: UCIP\_FA\_2016\_11543\_18941.jpg



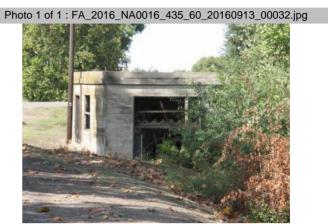
Siphon breaker on LS toe.

#### Levee Inspection Report By Mile - Fall 2016

#### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	31.63	Rating **	М	Issue No.		60	
LM End	31.63	Issue Type +	En	Location *	WS		
Catagony	Earthen Levee			GPS Latitude/Longitude			
Category			Start		End		
Item	Encroach	Encroachments			47°	39.066147°	
пеш				-121.870425°		-121.870425°	
DWR ID	VR ID DWR_NA0016_01_s _ 2012_60						
Comment Code							
BU : Building							
Inspector Comment							
Old concrete pumphouse on shoulder open needs to be sealed up.							



Old concrete pump house on the waterside levee slope. Fall 2011.

Rating \*\* Issue No. LM Start 32.03 41 32.03 Issue Type + Location \* WS LM End Earthen Levee GPS Latitude/Longitude Category End Start Vegetation 39.069130° 39.069130° -121.876638 ° -121.876638° DWR ID DWR\_NA0016\_01\_s \_ 2012\_41 Comment Code V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

No Photos

LM Start	32.04	Rating **	М	Issue No.		42		
LM End	32.17	Issue Type +	En	Location *	WS			
Category	Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End		
Item	Encroachi	ments		39.069487°		39.070063°		
item			-121.876817°		-121.879062°			
DWR ID	DWR_NA0016_01_s _ 2012_42							
Comment Code								
BU : Buildi	BU : Building							
Inspector Comment								
Grimes Boat Landing								



View of a building on waterward side of the levee. Fall 2016 inspection.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	32.07	Rating **	М	Issue No.		81		
LM End	32.09	Issue Type +	En	Location *		WS		
Earthen Levee			GPS La	atitud	le/Longitude			
Category				Start		End		
Item	Encroachments					39.069510°		
item	item				10°	-121.877728°		
DWR ID DWR_NA0016_01_f _ 2016_81								
		Comn	nent Cod	de				
DE : Debri	s							
			_					
Inspector Comment								



View of prunings and debris on WS slope near encroaching buildings. Fall 2016 inspection.

LM Start	32.27	Rating **	М	Issue No.		1563	
LM End	32.27	Issue Type +	En	Location *		WS	
Category	ental	GPS La	atitud	le/Longitude			
Category				Start		End	
Item	DWR UCI	P Field Study		39.0698	57°	39.069857°	
пеш				-121.8809	23 °	-121.880923 °	
DWR ID						·	
Comment Code							

Inspector Comment

FS\_ID:10364 DS\_ID:20304 EP\_NO: 9374

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to verify type of abandonment

FIELD\_STRUCT\_DESC: 2 of 4: \*Abandoned\* 4-inch pipe through levee 6.5 feet below crown. Gate valve on the waterward end. Siphon breaker in 24-inch corrugated metal riser unit on the landward slope. 4X4-concrete distribution box on south side of highway 45 at LS toe. (ABO No. 9374, 1960). Originally included in the 1960 O&M manual.

FS Date: 3/15/2013

### Photo 1 of 2: UCIP\_FA\_2016\_10364\_17645.jpg



Siphon Breaker in 25-inch CMP riser on LS slope with 4X4 concrete box off LS toe.

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	32.27	32.27 Rating ** M Issue No. 1		1563 (cont)			
LM End	32.27	Issue Type +	En	Location *		WS	
Category				GPS La	titud	e/Longitude	
Calegory	Category					End	
Item	DWR UC	P Field Study		39.0698	57°	39.069857°	
пеш				-121.8809	23 °	-121.880923 °	
DWR ID							
	Comment Code						

## Inspector Comment

FS\_ID:10364 DS\_ID:20304 EP\_NO: 9374

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to verify type of abandonment FIELD\_STRUCT\_DESC: 2 of 4: \*Abandoned\* 4-inch pipe through levee 6.5 feet below crown. Gate valve on the waterward end. Siphon breaker in 24-inch corrugated metal riser unit on the landward slope. 4X4concrete distribution box on south side of highway 45 at LS toe. (ABO No. 9374, 1960). Originally included in the 1960 O&M manual.

FS Date: 3/15/2013



4X4 concrete box off LS toe.

LM Start	32.95	Rating **	М	Issue No.		87		
LM End	32.95	Issue Type +	En	Location *	LS			
Category Earthen Levee				GPS La	atitud	e/Longitude		
Category	Category					End		
Item	Encroachments			39.0741	25°	39.074125°		
item				-121.8918	36°	-121.891836°		
DWR ID	DWR_NA0	016_01_f _ 201	6_87					
		Comn	nent Coo	le				
FW : Firew	FW : Firewood							
Inspector Comment								

### Photo 1 of 1: FA\_2016\_NA0016\_435\_87\_20160929\_00247.jpg



Firewood within 10 feet of levee toe on landside. Fall 2016 inspection.

\* Location + Issue Type Ma : Maintenance Deficiancy N/A: Not Applicable LS: Land Side Acceptable N : Not Inspected/Rated WS: Water Side Minimally Acceptable C : Corrected Ob : Design & System Obsolescence U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	32.97	Rating **	M	Issue No.		43			
LM End	32.97	Issue Type +	En	Location *	LS				
Earthen Levee				GPS La	atitud	e/Longitude			
Calegory	Category					End			
Item	Encroach	ments		39.0743	31 °	39.074331 °			
пеш				-121.8919	89°	-121.891989°			
DWR ID	DWR_NA0	016_01_s _ 201	2_43						
		Comn	nent Cod	de					
BU : Buildi	ng								
Inspector Comment									
This is at the town of Grimes.									

No Photos

LM Start	33.29	Rating **	М	Issue No.		5	
LM End	33.37	Issue Type +	Ma	Location *		WS	
Category	GPS La	atitud	le/Longitude				
Calegory	Calegory					End	
Item	2015 USACE Erosion Survey,				40°	39.079351	0
пеш	DRAFT			-121.8946	56°	-121.895317	0
DWR ID DWR_NA0016_01_s _ 2016_5							
Comment Code							

### Inspector Comment

2008 - Slow erosion of the hard toe. 2010 - Cobble rubble is failing, erosion is into the toe of the levee, with vertical slumping. 2012 - Site appears to be relatively stable. 2013 - New animal holes. 2015: No observed changes. [2015 Site ID: SAC\_125-6\_R]

Photo 1 of 1 : FA_2016	6_NA0016_43	35_5_20160913	3_00005.jpg
to the			



USACE 2013 Photo #1

LM Start	33.78	Rating **	U	Issue No.		207		
LM End	33.85	Issue Type +	Ob	Location *	LS			
Category Earthen Levee				GPS La	atitud	le/Longitude		
Category				Start		End		
Item	Seepage .	/ Sandboils		39.084393°		39.085184°		
item				-121.8945	22°	-121.895354°		
DWR ID DWR_NA0016_01_s _ 2016_207								
Comment Code								

### Inspector Comment

Seepage site is being monitored by the LMA.



View of the seepage on the landward side of the levee looking upstream. Spring 2016.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	34.00	Rating **	М	Issue No.	1564		
LM End	34.00	Issue Type +	En	Location *	LS		
Category	ental	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.0870	72°	39.087072°	
пеш				-121.8964	64°	-121.896464 °	
DWR ID							
	Comment Code						

Inspector Comment

FS\_ID:10403 DS\_ID:20268 EP\_NO: 9364A Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe rusted through at concrete distribution box. May be indicator of pipe condition through levee.

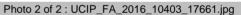
FIELD\_STRUCT\_DESC: 1 of 4: 16-inch steel pipe through levee 6.3 feet below crown (ABO No. 9364A, 1945). Pump in pump house on the waterward end. Siphon breaker in 36-inch steel riser unit on the landward slope. Discharges into 5X9 Concrete distribution box at LS toe. Installed by United States Army Corp of Engineers, 1945. Included in the 1960 O&M manual.

FS Date: 3/18/2013

LM Start	34.00	Rating **	М	Issue No.	1564 (cont)
LM End	34.00	Issue Type +	En	Location *	LS



Pump at WS berm.





siphon breaker in 36-inch steel riser on LS slope with concrete distribution box on LS toe.

### Levee Inspection Report By Mile - Fall 2016

### **Sacramento River West Side Levee District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	34.01	Rating **	М	Issue No.		100		
LM End	34.07	Issue Type +	En	Location *		LS		
Earthen Levee GPS Latitude/Longitude						le/Longitude		
Category				Start		End		
Item	Encroachi	ments		39.0871	76°	39.088099°		
пеш			-121.896480 ° -121.896498					
DWR ID DWR_NA0016_01_s _ 2015_100								
	Comment Code							
DT : Ditch								
		Inspecto	or Comm	nent				

Photo 1 of 1 : FA\_2016\_NA0016\_435\_100\_20160913\_00043.jpg



View of the ditch at the landward side of the levee looking upstream. Spring 2015.

LM Start	34.04	Rating **	М	Issue No.		88			
LM End	34.04	Issue Type +	Ма	Location *		WS			
Category	evee	GPS La	atitud	e/Longitude					
Calegory				Start		End			
Item	Encroachi	ments		39.0876	43°	39.087643°			
пеш	item				79°	-121.896479°			
DWR ID	DWR ID DWR_NA0016_01_f _ 2016_88								
		Comn	nent Cod	de					
PR : Pruni	ngs								
	Inspector Comment								

No Photos

LM Start	34.15	Rating **	U	Issue No.		208		
LM End	34.15	Issue Type +	Ob	Location *		LS		
Category	Category Earthen Levee				atitud	e/Longitude		
Calegory				Start		End		
Item	Seepage / Sandboils			39.0892	43°	39.089243 °		
item					62°	-121.896262 °		
DWR ID DWR_NA0016_01_s _ 2016_208								
		Comn	nent Cod	de				
Inspector Comment								
Clear water. Boil about 5 inches wide. Also a seepage area.								
, ,								



Boil has clear water coming out of the hole. Spring 2016.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Levee Inspection Report By Mile - Fall 2016

### **Sacramento River West Side Levee District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	34.15	Rating **	U	Issue No.		208 (cont)		
LM End	34.15	Issue Type +	Ob	Location *		LS		
Category	evee	GPS La	atitud	e/Longitude				
Calegory				Start		End		
Item	Seepage	/ Sandboils		39.0892	43°	39.089243°		
iteiii	-121.896				62 °	-121.896262 °		
DWR ID DWR_NA0016_01_s _ 2016_208								
		Comn	nent Cod	de				
Inspector Comment								
Clear water. Boil about 5 inches wide. Also a seepage area.								

Photo 2 of 2 : FA\_2016\_NA0016\_435\_208\_20160913\_00119.jpg

View of the seepage and boil at the toe of the levee on the landward side looking upstream. Spring 2016.

03/16/2016

Rating \*\* Issue No. 34.22 LM Start 89 34.22 Issue Type + Location \* WS LM End Ма Earthen Levee GPS Latitude/Longitude Category End Start Trim / Thin Trees 39.090248° 39.090248° -121.895788° -121.895788° DWR ID DWR\_NA0016\_01\_f \_ 2016\_89 Comment Code

T1 : Trim trees to at least five feet above ground level.

Inspector Comment

No Photos

LM Start	35.22	Rating **	С	Issue No.	138		
LM End	35.22	Issue Type +	Ма	Location *	WS		
Category Earthen Levee				GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Encroach	ments		39.0992	25°	39.099225	0
ILEIII	em				26°	-121.904326	, 0
DWR ID DWR_NA0016_01_f _ 2015_138							
Comment Code							

TR: Tree or limb

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	35.23	Rating **	A/W	Issue No.		1	
LM End	35.33	Issue Type +	Ma	Location *	WS		
Category				GPS La	atitud	e/Longitude	
Category				Start		End	
Item		CE Erosion S	Survey,	39.0994	82°	39.100836°	
пеш	DRAFT	DRAFT			30°	-121.904320°	
DWR ID	DWR_NA0	016_01_s _ 201	6_1				
		Comn	nent Cod	de			
	Inspector Comment						
1007 Mai	1007 Major soour off the downstroom and of existing rook greating a						

1997 - Major scour off the downstream end of existing rock, creating a scour pocket where the levee starts diverging from the bankline. 2000 - Some minor erosion, 20 ft deep hole at downstream end. 2004 - Small amount of new erosion. 2010 - Bad transition off downstream end of rock revetment, some new erosion. 2012 - Site extended downstream, minor new erosion. 2013- Minor new erosion. 2015: No observed changes. [2015 Site ID: SAC\_127-9\_R]



USACE 2013 Photo #1

LM Start	35.56	Rating **	М	Issue No.		1571
LM End	35.56	Issue Type +	En	Location *		WS
Category	Suppleme	GPS Latitude/Longitude				
Calegory			Start		End	
Item	DWR UCI	P Field Study		39.1035	33 °	39.103533°
пеш				-121.9068	14°	-121.906814°
DWR ID						

### Comment Code

### Inspector Comment

FS\_ID:10424 DS\_ID:20273 EP\_NO: 9364A Repair Type: Non-Urgent

Crossing Status: Found

UCIP Comments: Need to verify type of abandonment.

FIELD\_STRUCT\_DESC: 3 of 4. 18-inch steel pipe through levee 16.0 feet below crown. Metal cutoff wall. Gate valve on the waterward bank. Siphon breaker in 24-inch corrugated metal riser unit on the landward shoulder. (ABO No. 9364A, 1960). Originally included in the 1960 O&M manual.

FS Date: 3/18/2013

### Photo 1 of 1 : UCIP\_FA\_2016\_10424\_17700.jpg



Siphon breaker in 24-inch CMP riser on LS shoulder.

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	35.56	Rating **	М	Issue No.		1572		
LM End	35.56	Issue Type +	En	Location *		WS		
Category	Supplemental				GPS Latitude/Longitude			
Calegory		Start		End				
Item	DWR UCI	P Field Study		39.10353	3°	39.103533	0	
пеш				-121.90681	4 °	-121.906814	0	
DWR ID								

### Inspector Comment

Comment Code

FS\_ID:10425 DS\_ID:20398 EP\_NO: 9364

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Remove abandoned pipe from levee.
FIELD\_STRUCT\_DESC: 4 of 4: \*Abandoned\* 1.25-inch conduit through

levee 3.0 feet below crown (ABO No. 9364A).

FS Date: 3/18/2013

LM Start	35.56	Rating **	М	Issue No.	1572 (cont)
LM End	35.56	Issue Type +	En	Location *	WS



Electrical conduit on WS shoulder.

Photo 2 of 2: UCIP\_FA\_2016\_10425\_17701.jpg



Electrical conduit on WS shoulder.

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

	05.00	Dating **	A /\A/	Issue No.		400	
LM Start	35.69	Rating **	A/W	issue ivo.		139	
LM End	35.69	Issue Type +	Ма	Location *		WS	
Category Earthen Levee				GPS La	atitud	le/Longitude	
Odlogory				Start		End	
Item	Vegetatio	n		39.1053	881 °	39.105381°	
item				-121.9077	70°	-121.907770 °	
DWR ID DWR_NA0016_01_f _ 2015_139							
		Comn	nent Cod	de			
V7 : Trees	/ Woody \	/egetation					
		Inspecto	or Comm	nent			



View of the dying tree on the waterward side of the levee looking upstream. Fall 2015.

Rating \*\* Issue No. 35.86 С 140 LM Start 35.86 Issue Type + Location \* WS LM End En Earthen Levee GPS Latitude/Longitude Category Start End Encroachments 39.107611° 39.107611° -121.908817 ° -121.908817 DWR ID DWR\_NA0016\_01\_f \_ 2015\_140 Comment Code

TR: Tree or limb

Inspector Comment

No Photos

LM Start	36.15	Rating **	М	Issue No.		91		
LM End	36.15	Issue Type +	En	Location *		LS		
Category	Category Earthen Levee					e/Longitude		
Category	Category					End		
Item	Encroachments				86°	39.111186	0	
пеш			-121.9114	28°	-121.911428	0		
DWR ID	DWR_NA0	016_01_f _ 201	6_91					
		Comn	nent Cod	de				
PR : Prunii	ngs							
		Inspecto	or Comm	nent				



Photo 1 of 1: FA\_2016\_NA0016\_435\_91\_20160929\_00248.jpg



Tree prunings on landside slope. Fall 2016 inspection.

\* Location + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence LS: Land Side N : Not Inspected/Rated C : Corrected N/A: Not Applicable A : Acceptable M : Minimally Acceptable WS: Water Side A/W : Acceptable but Monitor & Maintain U : Unacceptable En: Enforcement

NA0016

### Flood Control Project Maintenance Levee Inspections

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	36.15	Rating **	M	Issue No.		1573
LM End	36.15	Issue Type +	En	Location *		LS
Category	Suppleme	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UCI	P Field Study		39.11123	3°	39.111233 °
пеш				-121.91145	0°	-121.911450 °
DWR ID						

### Comment Code

### Inspector Comment

FS\_ID:10426 DS\_ID:20345 EP\_NO: 9374

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Verify if pipe is abandoned with landowner and remove or abandon properly if necessary.

FIELD\_STRUCT\_DESC: \*ÁBANDONEĎ\* 3 of 3: 24-inch concrete encased steel drain pipe through levee 17.0 feet below crown. Slide gate on concrete headwalls in waterward end, walkway to control gate and gate valve on landward end (ABO No. 9374, 1960). Originally included in the 1960 O&M manual.

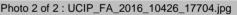
FS Date: 3/18/2013

LM Start	36.15	Rating **	М	Issue No.	1573 (cont)
LM End	36.15	Issue Type +	En	Location *	LS



Slide gate on WS toe.

03/18/2013 11:07





Headwall and gate valve on LS toe burried but partially exposed.

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	36.16	Rating **	М	Issue No.		94	
LM End	36.32	Issue Type +	En	Location *	LS		
Catagony	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory	Category					End	
Item	Encroach	ments		39.111405°		39.113321°	
пеш	nem			-121.911579°		-121.913226°	
DWR ID	DWR_NA0	016_01_f _ 201	6_94				
		Comn	nent Cod	de			
AT : Agricu	ıltural tillin	g					
Inspector Comment							
LMA contacted the property owner to eliminate this issue. LMA may							

LMA contacted the property owner to eliminate this issue. LMA may provide pictures of this site after issue is corrected.



Levee toe on landward side has been cut due to agricultural work. Fall 2016 inspection.

LM Start	36.24	Rating **	М	Issue No.		1570
LM End	36.24	Issue Type +	En	Location *		LS
Category	ental	GPS Latitude/Longitude				
Category				Start		End
Item	DWR UC	IP Field Study		39.1123	77°	39.112377°
item				-121.9122	86°	-121.912286°
DWR ID						

### Comment Code

### Inspector Comment

FS\_ID:10444 DS\_ID:20274 EP\_NO: 9374

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 3/18/2013 7:51:00 AM

UCIP Comments: Pipe should be abandoned properly.

FIELD\_STRUCT\_DESC: 4 of 4: 24-inch corrugated metal pipe through levee 15.5 feet below crown (ABO No. 9374, 1974). Two corrugated metal cutoff walls. Slide gate in 36-inch corrugated metal riser unit on the waterward slope. Pump house with no connection on waterward bank. 12-inch steel pipe with steel plate over end at WS toe (likely pump connection point). 6-foot diameter concrete riser on LS toe. Skid rails mounted on wood piling on the waterward slope. Department of Water Resources B.M. SR 47 on top of concrete anchor post on the waterward shoulder. Power pole and meter box on the waterward shoulder. Switch panel in metal house on the waterward slope. Concrete standpipe on the landward side. Overhead power line crosses the levee to service pole.

Photo 1 of 2: UCIP\_FA\_2016\_10444\_17725.jpg



36-inch CMP riser with slide gate on WS slope with 12-inch pipe at Toe.

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	36.24	Rating **	М	Issue No.	1	570 (cont)	
LM End	36.24	Issue Type +	En	Location *		LS	
Category	GPS Latitude/Longitude						
Calegory	Category					End	
Item	DWR UCI	P Field Study		39.11237	7°	39.112377	0
пеш				-121.91228	86 °	-121.912286	0
DWR ID							

### Inspector Comment

Comment Code

FS\_ID:10444 DS\_ID:20274 EP\_NO: 9374

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe should be abandoned properly.

FIELD\_STRUCT\_DESC: 4 of 4: 24-inch corrugated metal pipe through levee 15.5 feet below crown (ABO No. 9374, 1974). Two corrugated metal cutoff walls. Slide gate in 36-inch corrugated metal riser unit on the waterward slope. Pump house with no connection on waterward bank. 12-inch steel pipe with steel plate over end at WS toe (likely pump connection point). 6-foot diameter concrete riser on LS toe. Skid rails mounted on wood piling on the waterward slope. Department of Water Resources B.M. SR 47 on top of concrete anchor post on the waterward shoulder. Power pole and meter box on the waterward shoulder. Switch panel in metal house on the waterward slope. Concrete standpipe on the landward side. Overhead power line crosses

the levee to service pole.

FS Date: 3/18/2013 7:51:00 AM

Photo 2 of 2 : UCIP_FA_2016_10444_17724.jpg
12-inch filipe with metal cover
# 03/18/2013 11:25

Wooden ramp and 2-inch pump connectionat WS toe.

LM Start	36.32	Rating **	С	Issue No.	No. 141					
LM End	36.32	Issue Type +	En	Location *		LS				
Category	Earthen Levee						GPS La	atitud	le/Longitude	
Calegory	Category					End				
Encroachments			39.1133	05°	39.113305	0				
пеш		-121.9132	24°	-121.913224	0					
DWR ID	DWR_NA0	016_01_f _ 201	5_141							
Comment Code										
PR : Pruni	ngs									

Inspector Comment

No Photos

\* Location

LS: Land Side N/A: Not Applicable

WS: Water Side

CR: Crown

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected + Issue Type
Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

36.36	Rating **	С	Issue No.		213		
36.36	Issue Type +	Ма	Location *		WS		
Earthen Le	evee		GPS La	atitud	e/Longitude		
		Start		End			
Encroachr	ments		39.1137	16°	39.113716°		
			-121.913572°		-121.913572°		
DWR ID DWR_NA0016_01_s _ 2016_213							
	Comn	nent Coc	le				
r limb							
Inspector Comment							
	36.36 Earthen Lo Encroachr	36.36 Issue Type + Earthen Levee Encroachments  DWR_NA0016_01_s _ 201  Comn	36.36 Issue Type + Ma  Earthen Levee  Encroachments  DWR_NA0016_01_s _ 2016_213  Comment Coc  T limb	36.36 Issue Type + Ma Location *  Earthen Levee GPS La  Start  Encroachments 39.1137  -121.9135  DWR_NA0016_01_s _ 2016_213  Comment Code  I limb	36.36 Issue Type + Ma Location *  Earthen Levee GPS Latitud  Start  Encroachments 39.113716 °  -121.913572 °  DWR_NA0016_01_s _ 2016_213  Comment Code  T limb		

No Photos

Rating \*\* С Issue No. LM Start 36.67 212 Issue Type + Ма Location \* WS LM End 36.67 Earthen Levee GPS Latitude/Longitude Category Start End Encroachments 39.118018° 39.118018° -121.915083 ° -121.915083 ° DWR ID DWR\_NA0016\_01\_s \_ 2016\_212 Comment Code TR: Tree or limb

Inspector Comment

No Photos

Tree has fallen on the waterward slope of the levee.

LM Start	36.90	Rating **	М	Issue No.		101			
LM End	37.15	Issue Type +	En	Location *		LS			
Category	Earthen Levee			GPS La	atitud	e/Longitude			
Category				Start		End			
Item	Encroach	39.1202	10°	39.121510°					
item	item				18°	-121.921172°			
DWR ID	DWR_NA0	016_01_s _ 201	5_101						
		Comn	nent Cod	de					
DT : Ditch									
Inspector Comment									

No Photos

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable AW: Acceptable but Monitor & Maintain En: Enforcement

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### Levee Inspection Report By Mile - Fall 2016

### **Sacramento River West Side Levee District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	37.07	Rating **	A/W	Issue No.		33		
LM End	37.15	Issue Type +	Ob	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Vegetatio	n		39.1210	003°	39.121547°		
пеш				-121.9198	888°	-121.921278°		
DWR ID DWR_NA0016_01_s _ 2012_33								
		Comn	nent Cod	de				
V8 : Enviro	onmental F	Requirements.						
		Inspecto	or Comm	nent				
Revegetati	Revegetation site is fenced off.							

hc	oto 1 of 2 : FA_2016_NA0016_435	_33_	_20160913_	00027	.jpg
		N. C.			
			03/16/2	016	

View of the revegetation site on the waterward berm of the levee looking upstream. Spring 2016.

 LM Start
 37.07
 Rating \*\*
 A/W
 Issue No.
 33 (cont)

 LM End
 37.15
 Issue Type +
 Ob
 Location \*
 WS

Photo 2 of 2: FA\_2016\_NA0016\_435\_33\_20160913\_00028.jpg



Sign stating the revegetation site. Spring 2016.

LM Start	37.72	Rating **	С	Issue No.		142				
LM End	37.72	Issue Type +	Ма	Location *		WS				
Category	Earthen L	evee		GPS La	atitud	e/Longitude				
Category				Start		End				
Item	Animal Co	ontrol		39.1269	950°	39.126950°				
item			-121.9285	647°	-121.928547 °					
DWR ID	DWR ID DWR_NA0016_01_f _ 2015_142									
		Comn	nent Cod	de						
A3 : No roo compact o		le, but rodent rows.	burrows	visible; ne	ed to	backfill and				
		Inspecto	or Comm	nent						

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### **Levee Inspection Report By Mile - Fall 2016**

### **Sacramento River West Side Levee District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	37.81	Rating **	U	Issue No.	216				
LM End	37.81	Issue Type +	Ob	Location *	LS				
Category Earthen Levee			GPS La	atitud	le/Longitude				
Calegory				Start		End			
Item	Sandboils		39.1279	45°	39.127945°				
item				-121.929831 °		-121.929831 °			
DWR ID DWR_NA0016_01_s _ 2016_216									
		Comn	nent Cod	de					
		Inspecto	or Comm	nent					
LMA is monitoring the seepage.									

Photo 1 of 1 : FA\_2016\_NA0016\_435\_216\_20160913\_00120.jpg



View of the seepage on the landward side of the levee. Spring 2016.

LM Start	39.33	Rating **	С	Issue No.		217				
LM End	39.33	Issue Type +	Ма	Location *		WS				
Category	Earthen L	evee		GPS La	atitud	e/Longitude				
Calegory		Start		End						
Item	Encroachi	Encroachments			69°	39.144869°				
item				-121.937826°		-121.937826°				
DWR ID	DWR_NA0	016_01_s _ 201	6_217							
		Comn	nent Cod	de						
TR : Tree	or limb									
			•							
	Inspector Comment									

No Photos

LM Start	39.47	Rating **	С	Issue No.	143									
LM End	39.47	Issue Type +	En	Location *	LS									
Category	Earthen L	evee		GPS La	atitud	le/Longitude								
Category				Start		End								
Item	ments		39.1446	47°	39.144647	0								
item	item					68° -121.935368								
DWR ID	DWR_NA0	016_01_f _ 201	5_143											
		Comn	nent Cod	de										
TR : Tree	or limb													
		Inspecto	or Comm	nent										

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	<b>39.93</b> Rating ** M		Issue No.		1579	
LM End	39.93	Issue Type +	En	Location *		LS
Category	Suppleme	GPS Latitude/Longitude				
Calegory			Start		End	
Item	DWR UCI	P Field Study		39.1433	37 °	39.143387°
пеш				-121.92719	96°	-121.927196°
DWR ID						·

### Inspector Comment

Comment Code

FS\_ID:10528 DS\_ID:20282 EP\_NO: 9352

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe appears to have been removed from levee

section. Need to verify pipe abandonment.

FIELD\_STRUCT\_DESC: 12-inch steel pipe through levee 5.0 feet below crown. Switch house on waterward shoulder, pump and gate valve on waterward bank. Concrete discharge standpipe on landward side. Permit was for a 14-inch (Permit No. 635, 1935). Included in the 1960 O&M manual and ABO No. 9351.

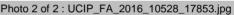
FS Date: 3/21/2013

LM Start	39.93	Rating **	М	Issue No.	1579 (cont)
LM End	39.93	Issue Type +	En	Location *	LS



Concrete standpipe at LS toe.

03/21/2013 10:43





Pipe visible at WS toe.

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	39.93	Rating **	М	Issue No.		1556		
LM End	39.93	Issue Type +	En	Location *	LS			
Category	Supplemental Supplemental				GPS Latitude/Longitude			
Calegory	Category			Start		End		
Item	DWR UCI	P Field Study		39.1433	87°	39.143387°		
пеш	item		-121.92719	96°	-121.927196°			
DWR ID						·		

### Inspector Comment

Comment Code

FS\_ID:11343 DS\_ID:22966 EP\_NO: 9352

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe should be removed.

FIELD\_STRUCT\_DESC: 1.5-inch galvanized iron electrical conduit through the levee at unknown depth. Visible on WS slope (Permit No.

635, 1935).

FS Date: 3/21/2013

		THE PARTY		
				-
-				
		Two.		
****	A CONTRACTOR			Name of
		- Step Manager		
· 是要是	SET MAN	100		edata (14)
			03/21/2	1013 10:43

Photo 1 of 2: UCIP\_FA\_2016\_11343\_18741.jpg

Electrical conduit approximately perpendicular to concrete riser on LS toe.

# LM Start 39.93 Rating \*\* M Issue No. 1556 (cont) LM End 39.93 Issue Type + En Location \* LS

Photo 2 of 2: UCIP\_FA\_2016\_11343\_18740.jpg



1.5-inch electrical conduit on WS slope.

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	40.23	Rating **	U	Issue No.		220	
LM End	40.29	Issue Type +	Ob	Location *	LS		
Category Earthen Levee				GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Seepage / Sandboils			39.142304°		39.142142°	
пеш		-121.921861 °		-121.920833°			
DWR ID	DWR_NA0	016_01_s _ 201	6_220				
		Comn	nent Cod	de			
	Inspector Comment						
LMA is monitoring seepage site.							



View of the seepage on the landward side of the levee looking upstream. Spring 2016.

LM Start	40.44	Rating **	М	Issue No.		1578
LM End	40.44	Issue Type +	En	Location *		LS
Category	Suppleme	ental		GPS La	atitud	le/Longitude
Category				Start		End
Item	DWR UCI	P Field Study		39.1438	38°	39.143838°
item		-121.9193	38°	-121.919338°		
DWR ID						

# Inspector Comment

Comment Code

FS\_ID:10527 DS\_ID:20285 EP\_NO: 12799

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe appears abandoned. Need to verify type of

abandonment

FIELD\_STRUCT\_DESC: 18-inch steel pipe through levee 6.5 feet below crown. 30-inch CMP standpipe on LS toe. Pump on the waterward toe. Vent in 12-inch CMP riser on the WS shoulder.

(Permit No. 12799, 1979). FS Date: 3/21/2013

### Photo 1 of 2 : UCIP\_FA\_2016\_10527\_17850.jpg



Vent in 12-inch CMP riser on WS shoulder.

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	40.44	Rating **	М	Issue No.	1578 (cont)			
LM End	40.44	Issue Type +	En	Location *	LS			
Supplemental				GPS Latitude/Longitude				
Calegory	biy			Start		End		
Item	DWR UCI	DWR UCIP Field Study			8°	39.143838°		
пеш				-121.91933	8°	-121.919338°		
DWR ID								
	Comment Code							

### Inspector Comment

FS\_ID:10527 DS\_ID:20285 EP\_NO: 12799

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe appears abandoned. Need to verify type of

abandonment

FIELD\_STRUCT\_DESC: 18-inch steel pipe through levee 6.5 feet below crown. 30-inch CMP standpipe on LS toe. Pump on the waterward toe. Vent in 12-inch CMP riser on the WS shoulder.

(Permit No. 12799, 1979). FS Date: 3/21/2013

Photo 2 of 2 : UCIP_FA_2016_10	0527_17849.jpg
The state of the s	Alberta Mills
The state of the s	AND DESCRIPTION OF THE PERSON
子工工工工工工工工工工工工工工工工工工工工工工工工工工工工工工工工工工工工	
	-
4/44	
	03/21/2013 11:16
AND AND SHAPE OF THE SHAPE OF T	<b>"是是一种"。</b>

30-inch CMP riser with slide gate at LS toe.

LM Start	40.64	Rating **	М	Issue No.		102			
LM End	40.72	Issue Type +	En	Location *		LS			
Category Earthen Levee				GPS Latitude/Longitude					
Category	Salegory			Start		End			
Item	Encroachments			39.1466	02°	39.147582°			
пеш					97°	-121.918429°			
DWR ID	DWR ID DWR_NA0016_01_s _ 2015_102								
Comment Code									
FE: Fence									

### Inspector Comment

### Photo 1 of 1: FA\_2016\_NA0016\_435\_102\_20160929\_00250.jpg



View of owner's fence on landside. Fall 2016 inspection.

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	40.89	Rating **	М	Issue No.		1583		
LM End	40.89	Issue Type +	En	Location *		LS		
Category	Supplemental			GPS Latitude/Longitude				
Calegory	Category			Start		End		
Item	DWR UC	IP Field Study		39.150054°		39.150054°		
пеш				-121.918717°		-121.918717°		
DWR ID								
	Comment Code							

### Inspector Comment

FS\_ID:10533 DS\_ID:20287 EP\_NO: 9351

Repair Type: Non-Urgent Crossing Status: Found

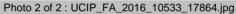
UCIP Comments: Appears abandoned. Should be abandoned properly. FIELD\_STRUCT\_DESC: 30-inch corrugated metal pipe through levee 17.5 feet below crown. Slide gate on the waterward end. Discharges into concrete box at the landward toe (ABO No. 9351, 1960). Small pump discharges into sump area in front of slide gate at WS toe. FS Date: 3/21/2013

 LM Start
 40.89
 Rating \*\*\*
 M
 Issue No.
 1583 (cont)

 LM End
 40.89
 Issue Type +
 En
 Location \*
 LS



Demolished concrete distribution box at LS toe.





Slide gate at WS toe.

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	41.60	Rating **	U	Issue No.		222
LM End	41.64	Issue Type +	Ob	Location *		LS
Category	Earthen L	evee		GPS La	atitude	e/Longitude
Calegory				Start		End
Item	Seepage .	/ Sandboils		39.1569	13°	39.157074°
item				-121.9283	24°	-121.928964°
DWR ID	DWR_NA0	016_01_s _ 201	6_222			
		Comn	nent Cod	de		
		Inspecto	or Comm	nent		
Seepage is being monitored by LMA.						



View of the seepage in the ditch at the toe of the levee on the landward side. Spring 2016.

LM Start	41.86	Rating **	M	Issue No.		1584	
LM End	41.86	Issue Type +	En	Location *	LS		
Category Supplemental				GPS Latitude/Longitude			
Category				Start End			
Item	DWR UCI	P Field Study		39.1586	48°	39.158648°	
item				-121.932429 ° -121.93242			
DWR ID							
	Comment Code						

## Inspector Comment

FS\_ID:10536 DS\_ID:20289 EP\_NO: 9341

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Appears abandoned. Needs to be abandoned

properly

FIELD\_STRUCT\_DESC: 30-inch pipe through levee 19.5 feet below crown. Slide gate in 36-inch corrugated metal pipe riser on the

waterward slope (ABO No. 9341, 1960)

FS Date: 3/21/2013

### Photo 1 of 2 : UCIP\_FA\_2016\_10536\_17883.jpg



30-inch CMP at outlet on LS toe.

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	41.86	Rating **	М	Issue No.	1584 (cont)		
LM End	41.86	Issue Type +	En	Location *	ocation * LS		
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start	End		
Item	DWR UCI	P Field Study		39.15864	8°	39.158648°	
пеш				-121.93242	9°	-121.932429°	
DWR ID							
	Comment Code						

### Inspector Comment

FS\_ID:10536 DS\_ID:20289 EP\_NO: 9341

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Appears abandoned. Needs to be abandoned

properly.

FIELD\_STRUCT\_DESC: 30-inch pipe through levee 19.5 feet below crown. Slide gate in 36-inch corrugated metal pipe riser on the

waterward slope (ABO No. 9341, 1960)

FS Date: 3/21/2013



View from LS toe of CMP pipe.

LM Start	42.22	Rating **	С	Issue No.		223		
LM End	42.22	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroach	croachments			03°	39.162903°		
пеш				-121.936042 °		-121.936042°		
DWR ID	DWR_NA0	016_01_s _ 201	6_223					
		Comn	nent Cod	de				
TR : Tree	or limb							
	Inspector Comment							

No Photos

### Levee Inspection Report By Mile - Fall 2016

### **Sacramento River West Side Levee District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	42.24	Rating **	М	Issue No.		103			
LM End	43.14	Issue Type +	En	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	Encroachi	ments		39.1631	32 °	39.175351°			
пеш				-121.9361	85 °	-121.941780°			
DWR ID	DWR_NA0	016_01_s _ 201	5_103						
		Comn	nent Cod	de					
DT : Ditch									
		Inspecto	or Comm	nent					

No Photos

LM Start	42.73	Rating **	М	Issue No.	146		
LM End	42.73	Issue Type +	Ma	Location *	LS		
Catagoria Earthen Levee				GPS Latitude/Longitude			
Category				Start End			
Item	Slope Sta	bility		39.1699	49°	39.169949°	
item				-121.9386	64°	-121.938664°	
DWR ID DWR_NA0016_01_f _ 2015_146							
Comment Code							

S2: Repair the levee slope damaged by foot traffic and prevent access where possible.

### Inspector Comment

Photo 1 of 1: FA\_2016\_NA0016\_435\_146\_20160929\_00251.jpg



Slope stability issue due to foot traffic. Fall 2016 inspection.

LM Start	42.90	Rating **	A/W	Issue No.	4		
LM End	43.09	Issue Type +	Ma	Location *	WS		
Category	ental	GPS Latitude/Longitude					
Calegory				Start		End	
Item		CE Erosion S	Survey,	39.17250	)1 °	39.174949°	
item	DRAFT			-121.93905	3°	-121.940737°	
DWR ID	DWR_NA0016_01_s _ 2016_4						
	Comment Code						

### Inspector Comment

2010 - Lower portion of 136.7 that did not extend far enough. Abrupt transition from upstream site. 2012 - Site extended upstream, minor new erosion. 2013 - Minor new erosion at the toe. New tree popout. Downstream limit extended. 2015: No observed changes. [2015 Site ID: SAC\_136-6\_R]





USACE 2013 Photo #1

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Levee Inspection Report By Mile - Fall 2016

### **Sacramento River West Side Levee District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	43.05	Rating **	U	Issue No.		97
LM End	43.05	Issue Type +	En	Location *		CR
Category	Earthen L	evee		GPS La	atituc	de/Longitude
Calegory				Start		End
Item	Encroachi	Encroachments				39.174301°
пеш				-121.9408	11 °	-121.940811 °
DWR ID	DWR_NA0	016_01_f _ 201	6_97			
		Comn	nent Cod	de		
PI : Pipe						
		Inspecto	or Comm	nent		
PVC irrigation pipe a few inches below the crown. Irrigates landscape on waterside if the levee.						

Photo 1 of 1 : FA\_2016\_NA0016\_435\_97\_20160929\_00252.jpg



View of pipe riser on landside slope near the crown of the levee. Fall 2016 inspection.

-									
LM Start	43.24	Rating **	М	Issue No.		46			
LM End	43.24	Issue Type +	En	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Category		Start		End					
Item	ments	39.1764	29°	39.176429°					
item				-121.942889 °		-121.942889°			
DWR ID DWR_NA0016_01_s _ 2012_46									
		Comn	nent Cod	de					
FE : Fence	Э								
Inspector Comment									



A solid fence along the toe of the levee. Photo taken spring 2012.

LM Start	43.26	Rating **	М	Issue No.		224		
LM End	43.26	Issue Type +	Ma	Location *		LS		
Category	Catagory Earthen Levee				atitud	e/Longitude		
Category				Start		End		
Item	Animal Control					39.176631°		
item				-121.9431	46°	-121.943146°		
DWR ID	DWR_NA0	016_01_s _ 201	6_224					
		Comn	nent Coo	de				
A2 : Repai animal acc		slope damag	ed by liv	estock and	pre	vent large		
Inspector Comment								
Slope damaged due to grazing.								



View of landside slope. Fall 2016 inspection.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Levee Inspection Report By Mile - Fall 2016

### **Sacramento River West Side Levee District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

	_							
LM Start	43.68	Rating **	С	Issue No.		147		
LM End	43.68	Issue Type +	Ma	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	, Animal Control				88°	39.181788°		
пеш				-121.9466	07°	-121.946607°		
DWR ID DWR_NA0016_01_f _ 2015_147								
		Comn	nent Cod	de				
A3 : No roccompact o		le, but rodent rows.	burrows	visible; ne	ed to	backfill and		
	Inspector Comment							

No Photos

LM Start	44.31	Rating **	С	Issue No.		227			
LM End	44.31	Issue Type +	En	Location *		WS			
Category	evee	GPS La	titud	e/Longitude					
Calegory				Start		End			
Item	Encroach	ments	39.1890	10°	39.189010°				
item				-121.9399	15°	-121.939915°			
DWR ID	DWR_NA0	016_01_s _ 201	6_227			·			
		Comn	nent Coc	le					
BU : Buildi	ng								
Inspector Comment									
Beehives a	Beehives are on the waterward side of the levee.								

No Photos

LM Start	44.87	Rating **	U	Issue No.		228	
LM End	45.23	Issue Type +	Ob	Location *		LS	
Category	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End	
Item	Seepage / Sandboils				95°	39.193890°	
item				-121.9454	08°	-121.950276°	
DWR ID	DWR_NA0	016_01_s _ 201	6_228				
		Comn	nent Cod	de			
Inspector Comment							
Seepage site is being monitored by LMA.							



View of the seepage on the landward side of the levee looking upstream. Spring 2016.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Levee Inspection Report By Mile - Fall 2016

### **Sacramento River West Side Levee District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	45.39	Rating **	A/W	Issue No.		108	
LM End	45.90	Issue Type +	Ob	Location *		WS	
Cotogony	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Vegetatio	n		39.1926	53°	39.188518°	
пеш				-121.952768°		-121.960446°	
DWR ID DWR_NA0016_01_s _ 2015_108							
		Comn	nent Cod	de			
V8 : Envir	onmental F	Requirements.					
		Inspecto	or Comm	nent			

LM Start	45.39	Rating **	A/W	Issue No.	108 (cont)
LMEss	45.00	Iceua Tyna +	Oh	Location *	MC



View of the revegetation site on the waterward side of the levee looking upstream. Spring 2016.

Photo 2 of 2: FA\_2016\_NA0016\_435\_108\_20160913\_00047.jpg



Sign stating revegetation site. Spring 2016.

LM Start	45.90	Rating **	М	Issue No.		105		
LM End	45.90	Issue Type +	En	Location *		LS		
Category	evee		GPS La	atitud	e/Longitude			
Calegory				Start		End		
Encroachments ltem				39.1884	69°	39.188469°		
пеш				-121.960428°		-121.960428°		
DWR ID DWR_NA0016_01_f _ 2016_105								
		Comn	nent Cod	de				
TR : Tree	or limb							
Inspector Comment								





View of debris within 10 feet of landside toe. Fall 2016 inspection.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	46.01	Rating **	М	Issue No.	109		
LM End	46.01	Issue Type +	En	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
Category	Category			Start		End	
Item	Encroachments			39.187479°		39.187479°	
item	item		-121.962081 °		-121.962081	0	
DWR ID	DWR_NA0	016_01_s _ 201	5_109				
		Comn	nent Cod	de			
PI : Pipe							
Inspector Comment							

The siphon filter is fixed. There is no external leak on the levee from the pipe, however there are vegetation growing in line with the pipe. Update 3/16/2016: Seems some maintenance was done on pipe. Vegetation on top of pipe is removed.

LM Start	46.01	Rating **	М	Issue No.	109 (cont)
LM End	46.01	Issue Type +	En	Location *	WS



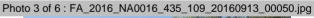
View of the siphon breaker on the shoulder of the waterward side of the levee looking upstream. Spring 2015.

Photo 2 of 6: FA\_2016\_NA0016\_435\_109\_20160913\_00049.jpg



Vegetation is aligned where the pipe is on the waterward side of the levee. Fall 2015.

LM Start	46.01	Rating **	М	Issue No.	109 (cont)
LM End	46.01	Issue Type +	En	Location *	WS





Perspective view of the vegetation where the pipe runs through the levee on the waterward side of the levee looking upstream. Fall 2015.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Levee Inspection Report By Mile - Fall 2016

### **Sacramento River West Side Levee District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	46.01	Rating **	М	Issue No.		109 (cont)	
LM End	46.01	Issue Type +	En	Location *		WS	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Encroachments			39.187479°		39.187479°	
пеш	item			-121.962081 °		-121.962081 °	
DWR ID	DWR_NA0	016_01_s _ 201	5_109				
Comment Code							
PI : Pipe						_	

### Inspector Comment

The siphon filter is fixed. There is no external leak on the levee from the pipe, however there are vegetation growing in line with the pipe. Update 3/16/2016: Seems some maintenance was done on pipe. Vegetation on top of pipe is removed.

LM Start	tart 46.01 Rating **		М	Issue No.	109 (cont)	
LM End	46.01	Issue Type +	En	Location *	WS	

Photo 4 of 6: FA\_2016\_NA0016\_435\_109\_20160913\_00051.jpg



Non-vegetated seems to align with the pipe. Spring 2016.

Photo 5 of 6: FA\_2016\_NA0016\_435\_109\_20160913\_00052.jpg



Perspective view of the non-vegetated area where the pipe seems to run through the levee looking downstream. Spring 2016.

LM Start	art 46.01 Rating **		M Issue No.		109 (cont)	
LM End	46.01	Issue Type +	En	Location *	WS	



Pipe seems to be capped off at the toe of the levee on the waterward side of the levee. Spring 2016.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	46.01	Rating **	М	Issue No.	1587		
LM End	46.01	Issue Type +	En	Location *	WS		
Category				GPS Latitude/Longitude			
Calegory	Category					End	
Item	DWR UCI	P Field Study		39.1874	97°	39.187497	0
пеш	tem			-121.9620	74°	-121.962074	0
DWR ID							
	Comment Code						

### Inspector Comment

FS\_ID:46812 DS\_ID:20314 EP\_NO: 15763

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Fresno valve on WS shoulder is broken. Pipe appears to be abandoned. Need to abandon properly if necessary. site visit on 10/09/2015 indicates water is present somewhere along the waterside levee slope. Possibly siphon breaker or fresno valve sprays and drains down levee slope from WS shoulder. internal inspection of pipe recommended to determine source of leak. Pipe is active, but can be removed and capped when not in use.

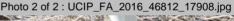
FIELD\_STRUCT\_DESC: 4-inch galvanized steel irrigation pipe through levee 2.0 feet below crown. Irrigation valve approx. 50 feet landward of the landward levee toe. Fresno valve on WS shoulder with connection for pump at WS berm. (Permit No. 15763, 1992).

FS Date: 3/22/2013

LM Start	46.01	Rating **	М	Issue No.	1587 (cont)
LM End	46.01	Issue Type +	En	Location *	WS



Broken fresno valve on WS shoulder





Pipe connection at WS toe.

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	46.35	Rating **	U	Issue No.		1591	
LM End	46.35	Issue Type +	En	Location *		WS	
Category	Supplemental			GPS Latitude/Longitude			
Calegory		Start		End			
Item	DWR UCI	P Field Study		39.1861	11 °	39.186111°	
пеш				-121.9680	69°	-121.968069 °	
DWR ID							
Comment Code							

### Inspector Comment

FS\_ID:50044 DS\_ID:20296 EP\_NO: 5551 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 09/23/2016 - A second pipe is visible adjacent to the intake pipe. According to the permit drawings, this pipe is an access pipe for a submersible pump used to clean the fish screen by backwashing. hole on LS shoulder of the levee and Moon Bend Rd. has been patched. No additional road damage is visible. (T. Hatch/UCIP)

09/01/2016 no visible changes from previous inspection. - (T. Hatch/UCIP) 10/09/2015 Possible sink hole along alignment 10-feet LS of siphon breaker on LS slope. Recent road repair along the approximate pipe alignment suggests that levee slumping is related to pipe. It is recommended that further investigation e.g. video inspection or other internal method may help determine if the issue is due to pipe or due to levee settlement in vicinity of the pipe. (T. Hatch/UCIP) FIELD\_STRUCT\_DESC: 18-inch steel irrigation pipe through the levee, 3 feet below the crown. Pump mounted on a piling structure on the waterside (WS) bank. A switch box is located on the WS shoulder and a siphon breaker is in a 30-inch corrugated metal riser on the landside (LS) shoulder. Pipe discharges into a concrete box at the toe of the LS slope (Permit issued under ABO No. 9349, 1974 - Davis). Pump and pump platform replaced under Permit No. 5551, 1968 - Davis. Fish screen installed under permit No. 17222, 2000- A&L Rental and Leasing . [Additional Reference(s): DWR Levee Logs, 2006]. FS Date: 9/23/2016



Recent pavement repair showing levee slumping. Photo taken from WS looking upstream along Moon Bend Rd

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	46.35	Rating **	U	Issue No. 1591 (conf			
LM End	46.35	Issue Type +	En	Location *	WS		
Category				GPS Latitude/Longitude			
Category				Start		End	
Item	DWR UCI	P Field Study		39.18611	1°	39.186111	0
пеш	em			-121.96806	9°	-121.968069	0
DWR ID							
	Comment Code						

### Inspector Comment

FS\_ID:50044 DS\_ID:20296 EP\_NO: 5551 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 09/23/2016 - A second pipe is visible adjacent to the intake pipe. According to the permit drawings, this pipe is an access pipe for a submersible pump used to clean the fish screen by backwashing. hole on LS shoulder of the levee and Moon Bend Rd. has been patched. No additional road damage is visible. (T. Hatch/UCIP)

09/01/2016 no visible changes from previous inspection. - (T. Hatch/UCIP) 10/09/2015 Possible sink hole along alignment 10-feet LS of siphon breaker on LS slope. Recent road repair along the approximate pipe alignment suggests that levee slumping is related to pipe. It is recommended that further investigation e.g. video inspection or other internal method may help determine if the issue is due to pipe or due to levee settlement in vicinity of the pipe. (T. Hatch/UCIP) FIELD\_STRUCT\_DESC: 18-inch steel irrigation pipe through the levee, 3 feet below the crown. Pump mounted on a piling structure on the waterside (WS) bank. A switch box is located on the WS shoulder and a siphon breaker is in a 30-inch corrugated metal riser on the landside (LS) shoulder. Pipe discharges into a concrete box at the toe of the LS slope (Permit issued under ABO No. 9349, 1974 - Davis). Pump and pump platform replaced under Permit No. 5551, 1968 - Davis. Fish screen installed under permit No. 17222, 2000- A&L Rental and Leasing . [Additional Reference(s): DWR Levee Logs, 2006]. FS Date: 9/23/2016



Siphon Breaker in 20-inch CMP riser on LS Shoulder. Photo taken from LS looking DS along Moon Bend Rd

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	47.01	Rating **	М	Issue No.		54
LM End	47.14	Issue Type +	En	Location *	ion * LS	
Category	evee	GPS Latitude/Longitude				
Category			Start		End	
Item	Vegetation			39.188544°		39.189733 °
item				-121.9792	?72 °	-121.981232 °
DWR ID	DWR_NA0	016_01_s _ 201	2_54			
Comment Code						
V6 : Landscaping						

### Inspector Comment

Cactus on slope and toe of levee, landscape continues along roadway with fence and stairs.

# Photo 1 of 1: FA\_2016\_NA0016\_435\_54\_20160913\_00030.jpg



View of the revegetation on the landward side of the levee looking upstream. Spring 2016.

LM Start	47.16	Rating **	М	Issue No.		1552
LM End	47.16	Issue Type +	En	Location *		LS
Category	Suppleme	ental		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	DWR UCI	IP Field Study		39.1897	83°	39.189783°
item				-121.9815	48 °	-121.981548°
DWR ID						

### Comment Code

### Inspector Comment

FS\_ID:10553 DS\_ID:20298 EP\_NO: 9347

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Need to verify type of abandonment.

FIELD\_STRUCT\_DESC: 1 of 2: 24-inch pipe through levee 25.5 feet below crown. 14-inch pipe sleeved through this pipe. Annular space grouted. Pump in pump house on the landward side. Gate valve in pump house (ABO No. 9347, 1960). Originally included in the 1960

O&M manual. FS Date: 3/22/2013

### Photo 1 of 1: UCIP\_FA\_2016\_10553\_17929.jpg



Possible location for pipe crossing.

### Levee Inspection Report By Mile - Fall 2016

### **Sacramento River West Side Levee District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	47.19	Rating **	A/W	Issue No.		90	
LM End	47.62	Issue Type +	Ob	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
				Start		End	
Item	Vegetatio	n		39.1899	30°	39.193491°	
item	-121.982143 ° -121.98818						
DWR ID DWR_NA0016_01_s _ 2014_90							
		Comn	nent Cod	de			
V8 : Envir	onmental F	Requirements.					
			•				
		Inspecto	or Comm	nent			

Photo 1 of 1: FA\_2016\_NA0016\_435\_90\_20160913\_00038.jpg



A revegetation site along the waterside berm. Spring 2014

LM Start	47.62	Rating **	A/W	Issue No.		3	
LM End	47.77	Issue Type +	Ma	Location *	WS		
Category				GPS Latitude/Longitude			
Calegory	egory					End	
Item	2015 USACE Erosion Survey,			39.1937	69°	39.195595°	
пеш	DRAFT		-121.9879	)1 °	-121.988621 °		
DWR ID DWR_NA0016_01_s _ 2016_3							
Comment Code							

### Inspector Comment

2010 - Old cobble site starting to unravel at toe. 2011 - Cobbles continue to unravel. 2013 - Site extended downstream to revetment. 2015: No observed changes. [2015 Site ID: SAC\_141-5\_R]



USACE 2013 Photo #1

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	47.71	Rating **	М	Issue No.		1553
LM End	47.71	Issue Type +	En	Location *	WS	
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	P Field Study		39.19477	2°	39.194772°
пеш				-121.98888	6°	-121.988886°
DWR ID						·

## Comment Code

### Inspector Comment

FS\_ID:10563 DS\_ID:20309 EP\_NO: 9347

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Need to determine type of abandonment.
FIELD\_STRUCT\_DESC: 2 of 2: \*Removed\*16-inch steel pipe through levee 17.3 feet below crown. Gate valve on the waterward end. Pump on the waterward bank. Switch box on the waterward shoulder. (ABO No. 9347,1960). Originally included in the 1960 O&M manual.

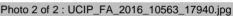
FS Date: 3/22/2013

LM Start	47.71	Rating **	М	Issue No.	1553 (cont)
I M End	47.71	Issue Type +	En	Location *	WS

### Photo 1 of 2: UCIP\_FA\_2016\_10563\_17941.jpg



Concrete pumphouse debris on WS berm.





JP on WS shoulder for removed pump switch house.

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

LM Start	48.38	Rating **	М	Issue No.		1577		
LM End	48.38	Issue Type +	En	Location *		WS		
Category	Supplemental			GPS Latitude/Longitude				
Calegory						End		
Item	DWR UCI	P Field Study		39.20376	1 °	39.203761°		
пеш				-121.98522	0°	-121.985220°		
DWR ID						·		

### Inspector Comment

Comment Code

FS\_ID:10566 DS\_ID:20300 EP\_NO: 9343

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe apears to be abandoned. Need to verify type of

abandonment.

FIELD\_STRUCT\_DESC: 2 of 2: 24-inch pipe through levee 15.5 feet below crown (pipe measures 12-inch on LS toe). Slant pump on steel piling structure on the waterward bank. Butterfly valve at toe of the landward slope. Overhead power line crosses the levee. (ABO No. 9343, 1960) Originally included in the 1960 O&M manual.

FS Date: 3/22/2013

LM Start	48.38	Rating **	М	Issue No.	1577 (cont)
LM End	48.38	Issue Type +	En	Location *	WS



Siphon Breaker in 30-inch CMP riser on LS shoulder and butterfly valve at LS toe.

### Photo 2 of 2: UCIP\_FA\_2016\_10566\_17953.jpg



Pump covered in brush on WS berm.

### Levee Inspection Report By Mile - Fall 2016

### Sacramento River West Side Levee District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	49.64	09/27/2016 09/28/2016	Oleg Yakimov

	40.40	Dating **	N 4	Issue No.		40	
LM Start	49.46	Rating **	М	issue ivo.	19		
LM End	49.57	Issue Type +	Ma	Location *	WS		
Category Supplemental				GPS Latitude/Longitude			
				Start		End	
ltem 2015 USACE Erosion Survey, DRAFT			39.213608°		39.213869°		
			-121.997543°		-121.999641 °		
DWR ID DWR_NA0016_01_s _ 2016_19							
Comment Code							
Inspector Comment							

2011 - Multiple scallops, one tree pop out. Old cobble site starting to unravel at midbank. 2012 - Mid bank slumping continues to worsen but cobble at the toe appears stable. 2015: No observed changes. [2015 Site ID: SAC\_143-5\_R]



USACE 2013 Photo #1